Website:http://biz.LGservice.com
E-mail:http://www.LGEservice.com/techsup.html

COLOR MONITOR
SERVICE MANUAL

CHASSIS NO. : CL-56

MODEL: FLATRON L172WT (L172WAL-AL**T)

( ) **Same model for Service

CAUTION

BEFORE SERVICING THE UNIT,
READ THE **SAFETY PRECAUTIONS** IN THIS MANUAL.

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SPECIFICATIONS

1. LCD CHARACTERISTICS

Type	: TFT Color LCD Module
Size	: 17.1inch
Pixel Pitch	: 0.291mm x 0.291mm
Color Depth	: 8-bit, 16,777,216 colors
Electrical Interface	: LVDS
Size	: 258.0(V) x 400(H) x 22.0(D)
Surface Treatment	: Anti-Glare, Hard Coating(3H)
Operating Mode	: Normally Black, Transmissive
Backlight Unit	: 6-CCFL (Cold Cathode Fluorescent Lamp)

2. SPECIAL FUNCTION

2-1. Auio AMP

1)Output	: 3Wrms + 3Wrms
Rated Output	: 2.7W(Min)
	: 13.1Vpp(4.65Vrms)
2)Freq. Character	: 100Hz~10KHz Range(-3dB)
3)Input	: PC - 0.7±0.1Vrms
	AV - 0.4±0.1Vrms

2-2. SPEAKER

1) Impedance	: 8Ω
2) Input	: Max-5W, Normal-3W

2-3. TV

1) Type	: NTSC
2) Tuner IF	: PIF - 45.75MHz
	SIF - 41.25MHz
	CIF - 42.17MHz
3) Receiving Channel	: VHF- Low: 55.25~127.25MHz
	HIGH: 133.25~361.25MHz
	UHF - 367.25~801.25MHz

2-4. AV

1) Video Level	: Input - 0.7±0.15Vp-p
2) Sync Level	: Input - 0.286±0.075Vp-p
3) Color Burst	: Input - 0.214±0.072Vp-p
4) Audio Level	: AV Input - 0.4±0.1Vrms
	PC Input - 0.7±0.1Vrms
5) Video Cross Talk	: 43dB

3. SIGNAL

3-1. Operating Frequency

Horizontal	: 30 ~ 66kHz(Digital: 30~63kHz)
Vertical	: 56 ~ 85Hz

3-2. Sync : Separate, Composite SOG, Digital

4. OPTICAL CHARACTERISTICS

4-1. Viewing Angle by Contrast Ratio ≥ 10

Left	: -85° min., -88°(Typ)
Right	: +85° min., +88°(Typ)
Top	: +85° min., +88°(Typ)
Bottom	: -85° min., -88°(Typ)

4-2. Luminance : 320(min), 370(Typ) **-9300K**
300cd/m²(min) **-6500K**

4-3. Contrast Ratio : 300(min), 400(Typ)

5. RESOLUTION

SXGA : 1280 x 1024 @ 60Hz
WXGA : 1280 x 768 @ 60Hz

6. POWER SUPPLY

6-1. Power Adaptor
Input : AC 100-240V~, 50/60Hz , 1.1A

6-2. Power Consumption

MODE	H/V SYNC	VIDEO	POWER CONSUMPTION	LED COLOR
POWER ON (NORMAL)	ON/ON	ACTIVE	less than 70 W	GREEN
STAND-BY	OFF/ON	OFF	less than 5 W	AMBER
SUSPEND	ON/OFF	OFF	less than 5 W	AMBER
POWER OFF	OFF/OFF	OFF	less than 5 W	AMBER

7. ENVIRONMENT

7-1. Operating Temperature: 10°C~35°C (50°F~95°F)

7-2. Operating Humidity : 10%~80%

7-3. MTBF : 50,000 Hours(Typ.)

8. DIMENSIONS (with TILT/SWIVEL)

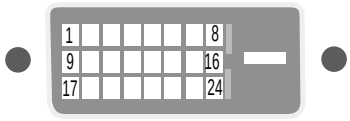
Width	: 505.5 mm (19.90")
Height	: 365 mm (14.37")
Depth	: 231.5 mm (9.11")

9. WEIGHT (with TILT/SWIVEL)

Net. Weight	: 6.6kg (14.55 lbs)
Gross Weight	: 10.0kg (22.05 lbs)

Signal Connector Pin Assignment

• DVI-D Connector (Digital)



Pin	Signal (DVI-D)	Pin	Signal (DVI-D)
1	T. M. D. S. Data2-	16	Hot Plug Detect
2	T. M. D. S. Data2+	17	T. M. D. S. Data0-
3	T. M. D. S. Data2/4 Shield	18	T. M. D. S. Data0+
4	T. M. D. S. Data4-	19	T. M. D. S. Data0/5 Shield
5	T. M. D. S. Data4+	20	T. M. D. S. Data5-
6	DDC Clock	21	T. M. D. S. Data5+
7	DDC Data	22	T. M. D. S. Clock Shield
8	Analog Vertical Sync.	23	T. M. D. S. Clock+
9	T. M. D. S. Data1-	24	T. M. D. S. Clock-
10	T. M. D. S. Data1+		
11	T. M. D. S. Data1/3 Shield		
12	T. M. D. S. Data3-		
13	T. M. D. S. Data3+		
14	+5V Power		
15	Ground (return for +5V, H. Sync. and V. Sync.)		

T. M. D. S. (Transition Minimized Differential Signaling)

PRECAUTION

WARNING FOR THE SAFETY-RELATED COMPONENT.

- There are some special components used in LCD monitor that are important for safety. ***These parts are marked ⚠on the schematic diagram and the replacement parts list.*** It is essential that these critical parts should be replaced with the manufacturer's specified parts to prevent electric shock, fire or other hazard.
- Do not modify original design without obtaining written permission from manufacturer or you will void the original parts and labor guarantee.

TAKE CARE DURING HANDLING THE LCD MODULE WITH BACKLIGHT UNIT.

- Must mount the module using mounting holes arranged in four corners.
- Do not press on the panel, edge of the frame strongly or electric shock as this will result in damage to the screen.
- Do not scratch or press on the panel with any sharp objects, such as pencil or pen as this may result in damage to the panel.
- Protect the module from the ESD as it may damage the electronic circuit (C-MOS).
- Make certain that treatment person's body are grounded through wrist band.
- Do not leave the module in high temperature and in areas of high humidity for a long time.
- The module not be exposed to the direct sunlight.
- Avoid contact with water as it may a short circuit within the module.
- If the surface of panel become dirty, please wipe it off with a softmaterial. (Cleaning with a dirty or rough cloth may damage the panel.)

⚠ CAUTION

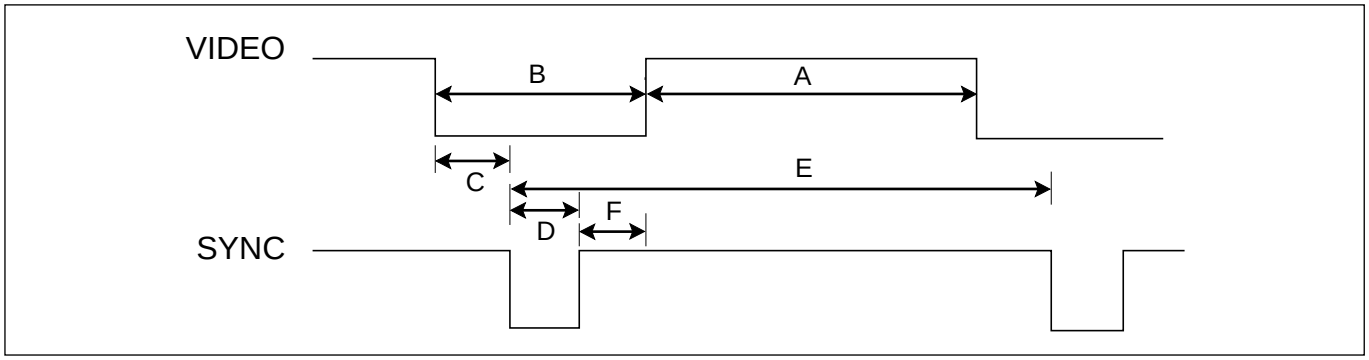
Please use only a plastic screwdriver to protect yourself from shock hazard during service operation.

⚠ WARNING

BE CAREFUL ELECTRIC SHOCK !

- If you want to replace with the new backlight (CCFL) or inverter circuit, must disconnect the AC adapter because high voltage appears at inverter circuit about 650Vrms.
- Handle with care wires or connectors of the inverter circuit. If the wires are pressed cause short and may burn or take fire.

TIMING CHART



<< Dot Clock **(MHz),** Horizontal Frequency **(kHz)**, Vertical Frequency **(Hz)**, Horizontal etc... **(µs)**, Vertical etc... **(ms) >>**

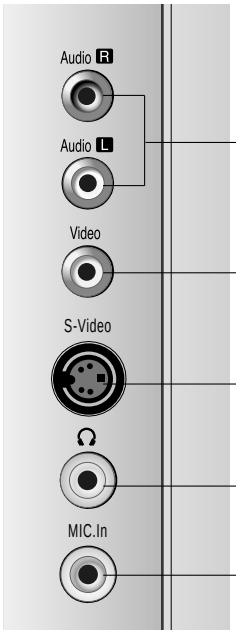
Mode	H/V Sort	Sync Polarity	Dot Clock	Frequency	Total Period (E)	Video Active Time (A)	Front Porch (C)	Sync Duration (D)	Back Porch (F)	Resolution
1	H	+	25.175	31.469	800	640	16	96	48	**640x350 70Hz**
	V	–		70.8	449	350	37	2	60	
2	H	–	28.321	31.468	900	720	18	108	54	**720x400 70Hz**
	V	+		70.8	449	400	12	2	35	
3	H	–	25.175	31.469	800	640	16	96	48	**640x480 60Hz**
	V	–		59.94	525	480	10	2	33	
4	H	–	31.5	37.5	840	640	16	64	120	**640x480 75Hz**
	V	–		75	500	480	1	3	16	
5	H	–	36.0	43.269	832	640	56	56	80	**640x480 85Hz**
	V	–		85.0	509	480	1	3	25	
6	H	+	40.0	37.879	1056	800	40	128	88	**800x600 60Hz**
	V	+		60.317	628	600	1	4	23	
7	H	+	49.5	46.875	1056	800	16	80	160	**800x600 75Hz**
	V	+		75.0	625	600	1	3	21	
8	H	+	56.25	53.674	1048	800	32	64	152	**800x600 85Hz**
	V	+		85.061	631	600	1	3	27	
9	H	+/–	57.283	49.725	1152	832	32	64	224	**832x624 75Hz**
	V	+/–		74.55	667	624	1	3	39	
10	H	–	65.0	48.363	1344	1024	24	136	160	**1024x768 60Hz**
	V	–		60.0	806	768	3	6	29	
11	H	–	78.75	60.123	1312	1024	16	96	176	**1024x768 75Hz**
	V	–		75.029	800	768	1	3	28	
12	H	+	108.0	63.981	1688	1280	48	112	248	**1280x1024 60Hz**
	V	+		60.02	1066	1024	1	3	38	
13	H	+	80.14	47.7	1680	1280	66	134	200	**1280x768 60Hz**
	V	+		60	795	768	1	3	23	

OPERATING INSTRUCTIONS

FRONT VIEW

Front Control Panel(P6)

REAR VIEW



AV(CVBS) Input Terminal(Audio)

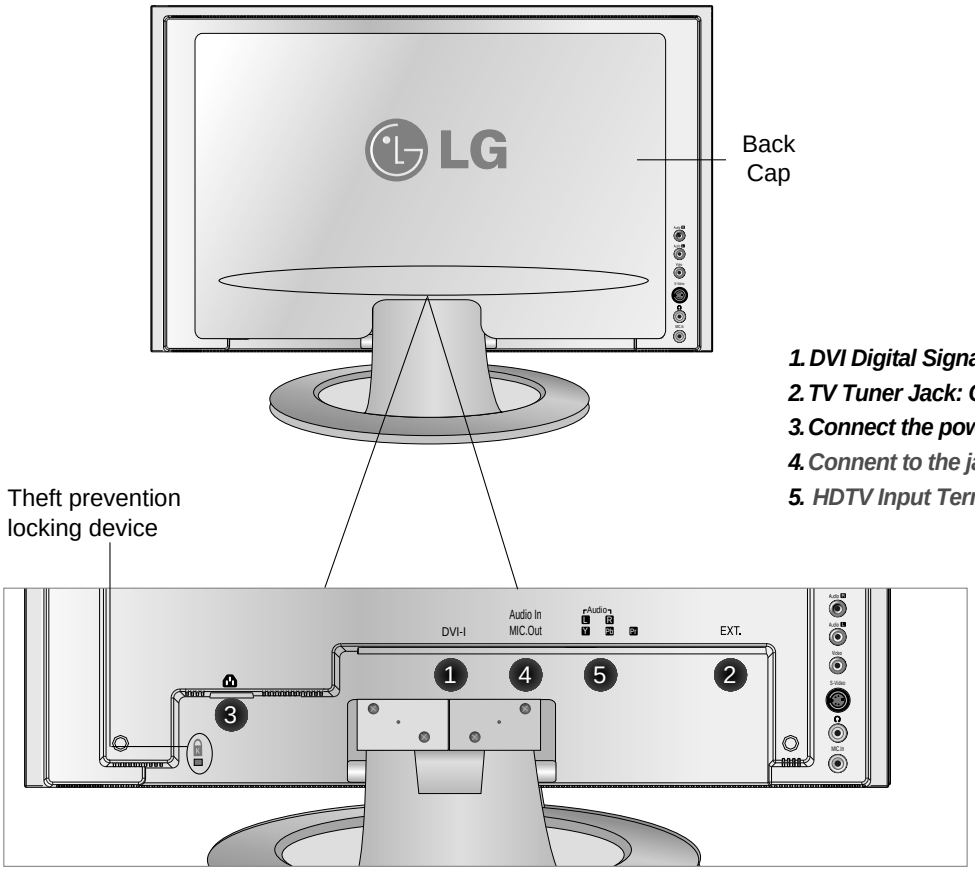
AV(CVBS) Input Terminal(Video)

S-Video Input Terminal

Headphone/Earphone Connection Terminal

Microphone Connection Terminal

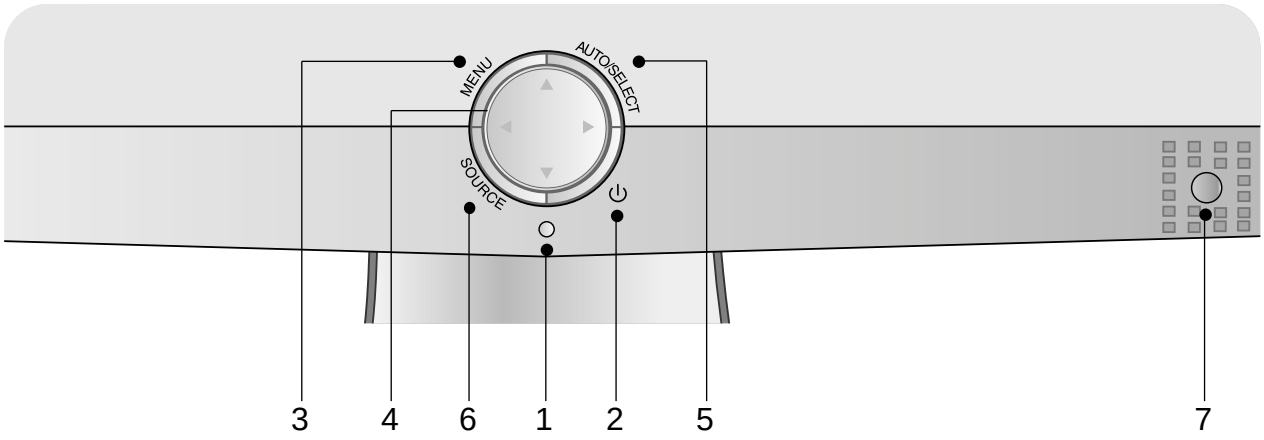
REAR VIEW CONNECTOR PANEL



1. ***DVI Digital Signal Connector*** *(DVI-D or DVI-A)*
2. ***TV Tuner Jack: Connect the antenna.***
3. ***Connect the power cord.***
4. ***Connent to the jack in the PC sound card***
5. ***HDTV Input Terminal***

OPERATING INSTRUCTIONS

Front Control Panel



1 **Power LED**
- This Indicator lights up green when the display operates normally. If the display is in DPM (Energy Saving) mode, this indicator color changes to amber.

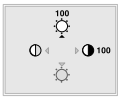
2 **Power Button**
- Press the button to turn on the power. Press the button again to turn it off.

3 **MENU Button**
- Use this button to show/hide the OSD (On Screen Display) menu screen.

4 **OSD Select/Adjust Button**
- Use the button to select an icon or adjust the setting in the OSD screen.

▼▲◄►

▼▲
- Use this button to directly control brightness and contrast of the PC signal (DVI-D/DVI-A).
- Use this button to control the channel for the TV signal.



◄►
- Adjust the volume.

5 **AUTO/SELECT Button**

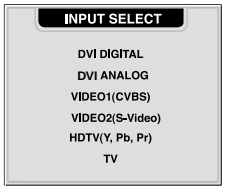
[For DVI-ANALOG signal]
- Select the icon to adjust on the OSD screen.
- If you press the [AUTO/SELECT] button, automatic screen adjustment will be started.

[Other signals that DVI-ANALOG]
- The current signal and mode information will be displayed.

6 **SOURCE Button**

SOURCE → ▼▲ → **AUTO/SELECT**
- Select the input signal

DVI DIGITAL	DVI digital signal
DVI ANALOG	DVI analog signal
VIDEO1(CVBS)	Composite video
VIDEO2(S-Video)	S-Video
HDTV(Y, Pb, Pr)	HD television
TV	Television



7
- The unit that receives the signal from the remote controller.

OSD Lock/Unlock Button

Menu button + ►

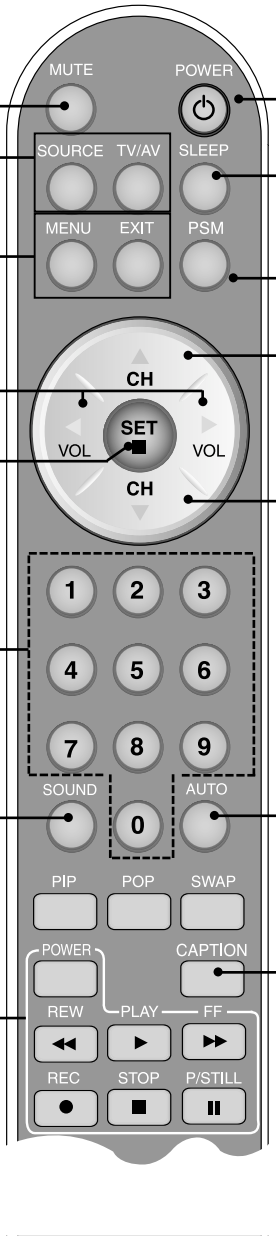
■ Use this button to lock/unlock OSD screen adjustment. (Activated when pressed together longer than 5 seconds.)

• OSD is locked

• OSD is unlocked.

■ Under the **CAPTION & VCHIP** menu, it is also possible to lock/unlock the OSD screen adjustment with the **'KEY LOCK'** tab. PAGE

Remote Controller Buttons



Mute button

• Input Select Button
• TV/AV Button
(See next page)

•Menu Button
• Exit Button

Volume ◀ ▶ Button

Check Button

Channel Number Select Button
Operational at the TV mode only

Sound Mode Select
Select the sound mode
: MONO/STEREO/SAP

Video Operation Button
Applicable for LG products only

Power On/Off Button

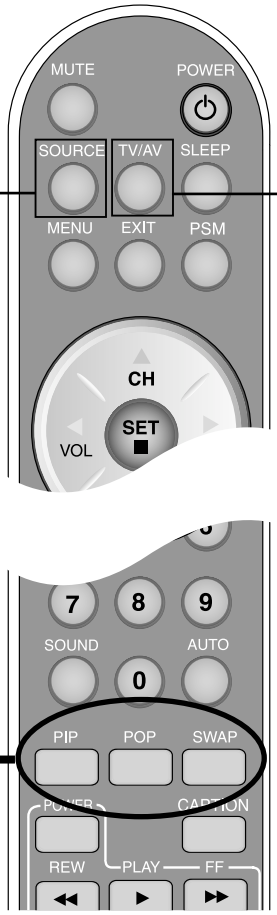
Sleep Button
When watching AV/HDTV/TV
- The monitor will be automatically turned off after a certain period of time. Press this button repetitively to select an appropriate time duration

PSM Button
When watching AV/HDTV/TV
- Automatically adjusts the image. Press this button repetitively to set the intended screen.

Channel Up/Down Button

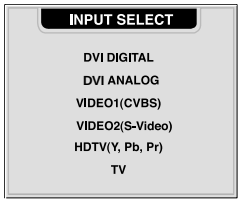
Auto Channel Button
- TV: Automatic TV channel setup
- PC: Automatic adjustment function (Operational for the analog signal only)

CAPTION Button



• Input Select Button

If you press the button once, the following Input Signal Window will appear. Select the signal type you want using the ▼▲ button.



• TV/AV Button

This button will be enabled only when you selected the TV/AV signal. The signal type will be changed with the following order. Set the signal type you want.

TV ➞ VIDEO1 ➞ VIDEO2 ➞ HDTV

1. PIP (Picture in Picture) Button

The sub-screen moves to the next mode whenever you press this button.
: Small -> Large -> Off

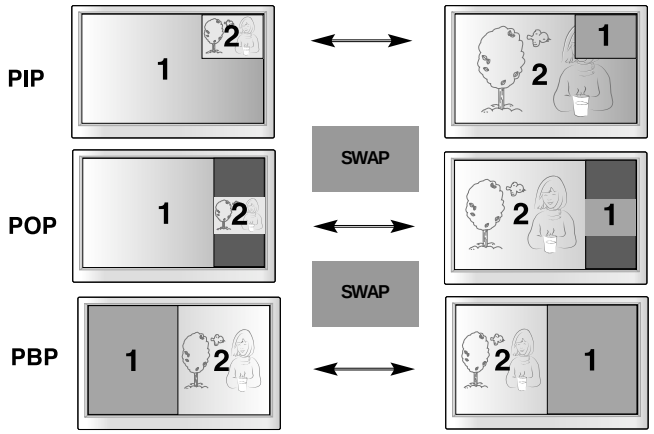
2. POP (Picture out Picture) Button

The sub-screen moves to the next mode whenever you press this button.
: POP ON -> PBP(FULL) -> PBP(4:3) -> OFF

POP ON **PBP (FULL)** **PBP (4:3)**

3. Swap Button

You can swap the main screen and the sub-screen when the PIP/POP/PBP function is used..



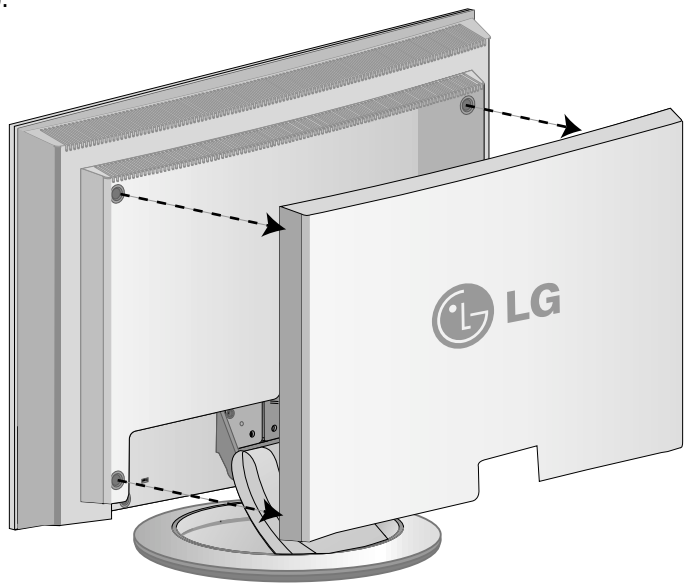
When **'Input Signal 1'** comes on in the main screen, only **'Input Signal 2'** can be displayed on the sub-screen. On the contrary, if the main screen displays **'Input Signal 2'**, the sub-screen can display **'Input Signal 1'** only. You can swap **'Input Signal 1'** and **'Input Signal 2'** using the SWAP button.

<Table of PIP/POP/PBP Function Support>

Sub \ Main	DVI-D	DVI-A	VIDEO1	VIDEO2	HDTV	TV
DVI-D	X	X	●	●	●	●
DVI-A	X	X	●	●	X	●
VIDEO1	●	●	X	X	●	X
VIDEO2	●	●	X	X	●	X
HDTV	●	X	●	●	X	●
TV	●	●	X	X	●	X

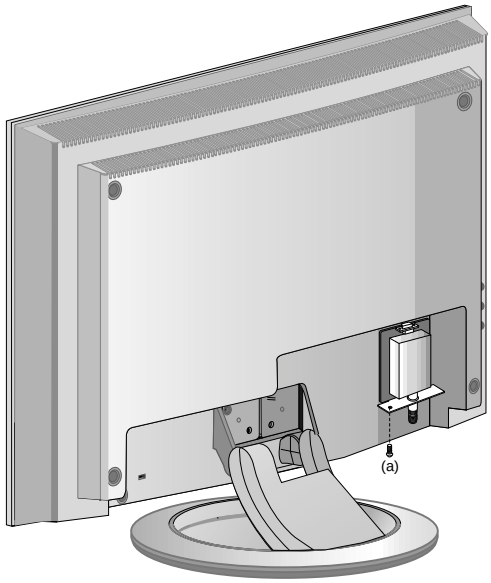
DISASSEMBLY

1.BACK CAP REMOVAL
1)Remove the Back cap.

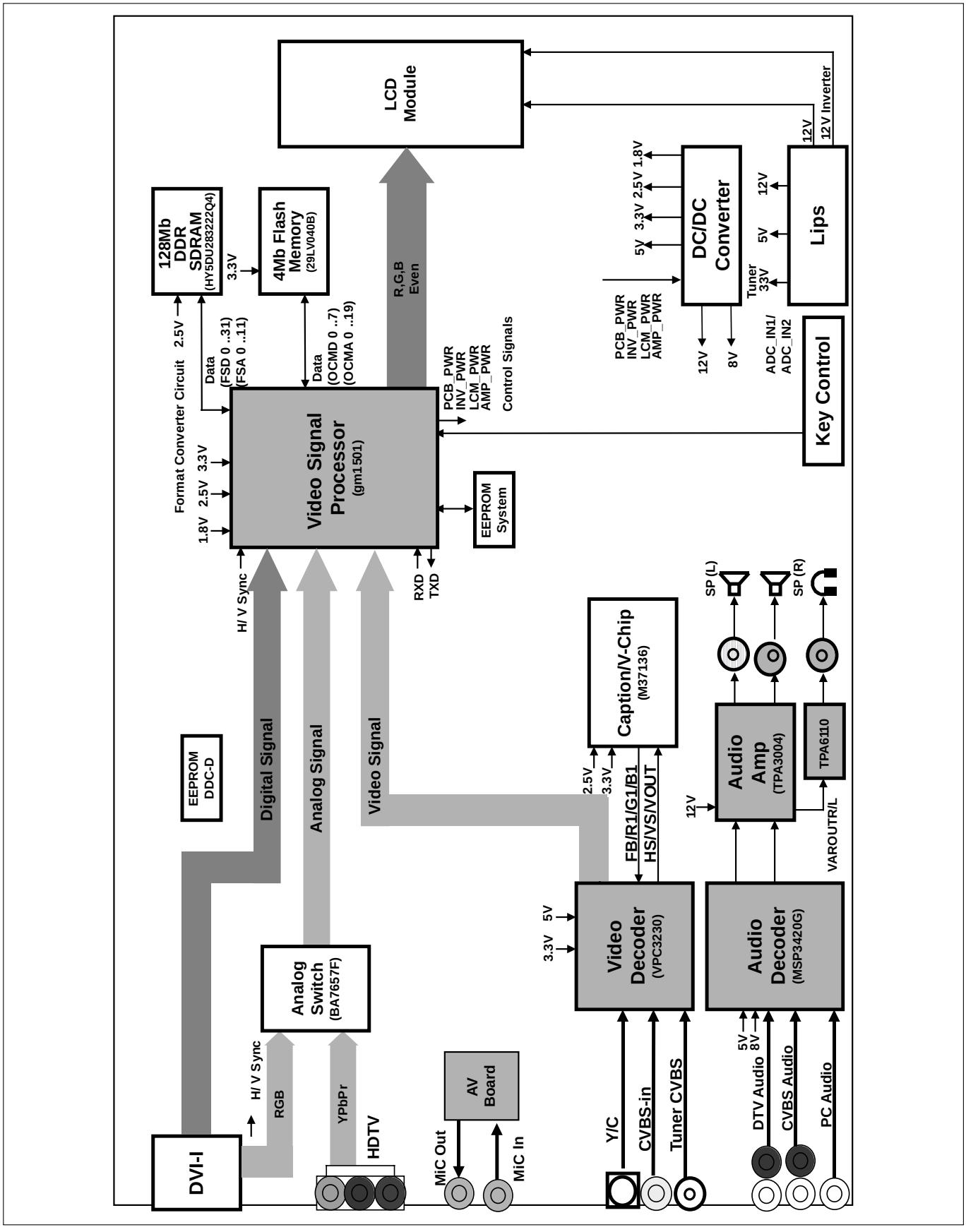


2. TV TUNER REMOVAL
1)Remove the screw(a).
2)Remove the Tuner.

CAUTION
To prevent scratches on the back cover, make sure to detach the tuner before detaching the back cover.



BLOCK DIAGRAM



DESCRIPTION OF BLOCK DIAGRAM

1. Input Signal Part

It is composed of four parts.
-PC signal input part:24pin DVI-I and PC Audio input jack.
-AV Video input part: RCA Jack (CVBS signal), S-Video Jack
-HDTV input part : YPbPr Jack and RL Stereo Audio input jack
-TV signal input part: TV Tuner input Connector (TV signal)

2. Video Signal Processor

It is composed of GM1501(U402)
GM1501 includes A/D Converter and LVDS Transmitter
GM1501 is directly Inputted Analog and Digital Signal or Video Signal from Video Decoder
This Signal is converted into compatible Signal by MICOM's control and then GM1501 transmit it to LCD Module.

3. Analog Switch

It is composed of BA7657F
BA7657F Switch DVI-A to HDTV

4. Micom Controller

It is composed of 29LV040B(U403) its functions is controlling each IC, display mode and frequency through EEPROM and IIC communication.

5. Video decoder.

This block is composed of VPC3230D (U203) and peripheral devices.
This IC analyzes input signal of CVBS, Y/C and output analyzed signal (8bit interlace signal) to Video Signal Processor block.
Analyzed signal has video control signals like Contrast, Brightness, Sharpness, Color, tint signals Including Adaptive Comb Filter.

6. Audio decoder part.

This block is composed of MSP3420G (U503) and peripheral devices.
This IC analyzes Audio input signal through A/V Jack and PC audio.
And output the analyzed signals to Audio Amplifier (TPA3004).

7. Audio Amplifier

This block is composed of TPA3004 (U505) and peripheral devices.
It amplifies audio signal input from Audio Decoder and output amplified audio signal to Speaker, Audio Output Jack.

8. Control

It receives outer key input, transmits the input to Micom(U403).
There is key input part and remote controller receiver.

9. LIPS Part

It is composed of two parts
- Power Part functions that Input power converts to 33V,12V,5V power for operating circuits.
- Inverter Part functions that Input Power converts to compatible "Vrms" value for operate LCD lamp.

ADJUSTMENT

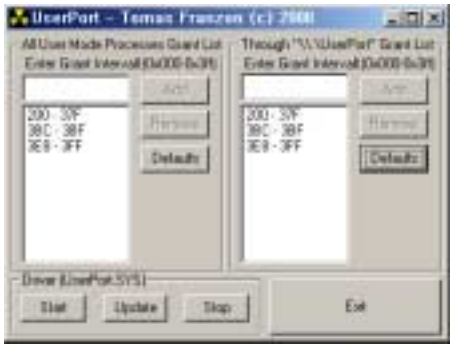
Windows EDID V1.0 User Manual

Operating System: MS Windows 98, 2000, XP
Port Setup: Windows 98 => Don't need setup
Windows 2000, XP => Need to Port Setup.
This program is available to LCD Monitor only.

[Analog EDID]
At first select "DVI-Analog" in "Source" menu.

[Digital EDID]
At first select "DVI-Digital" in "Source" menu.

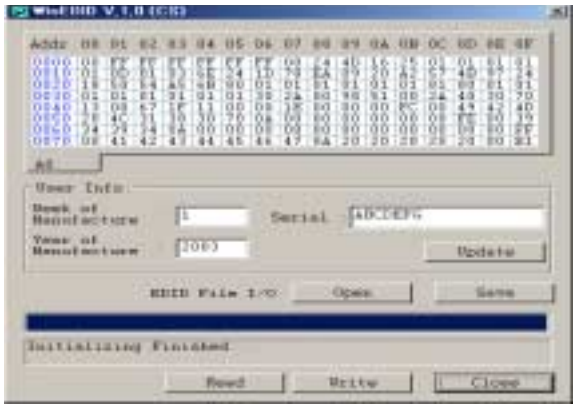
1. Port Setup
   a) Copy "UserPort.sys" file to
   "c:\WINNT\system32\drivers" folder
   b) Run Userport.exe



   c) Remove all default number
   d) Add 300-3FF

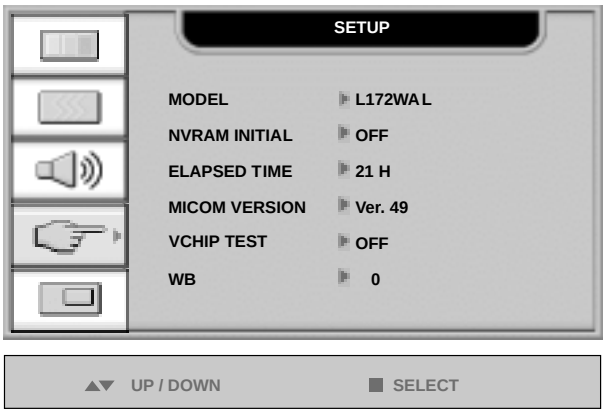
   e) Click Start button.
   f) Click Exit button.

2. EDID Read & Write
   1) Run WinEDID.exe

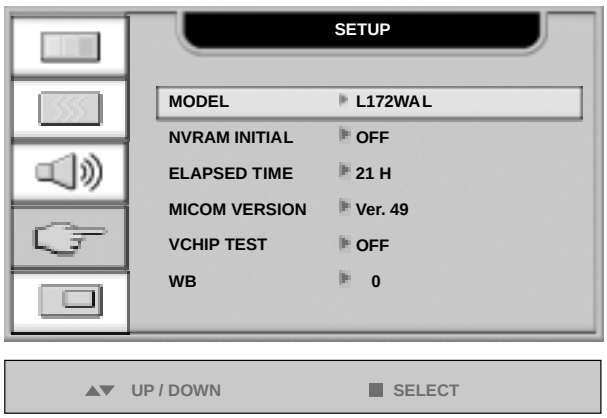


   2) Edit Week of Manufacture, Year of Manufacture, Serial Number
      a) Input User Info Data
      b) Click "Update" button
      c) Click " Write" button

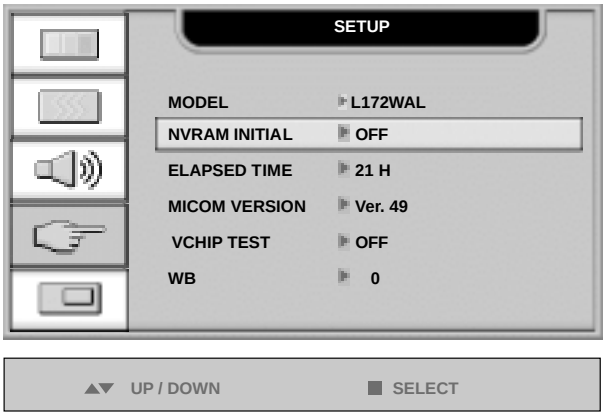
SERVICE OSD



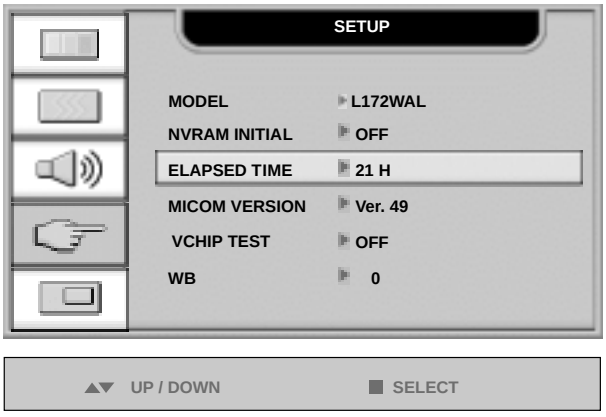
1. Press the MENU key and then enter 3-0-2-0 with the Direct Channel Select button on the remote control (See the remote control figure on page 8) to access the Service menu.



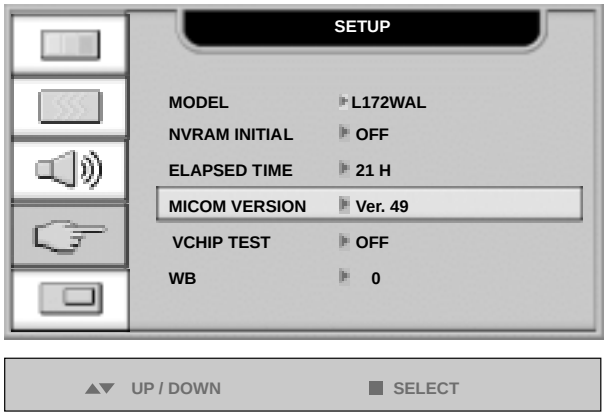
2. MODEL shows the factory model name of the monitor. You don't need to make any adjustment in this menu.



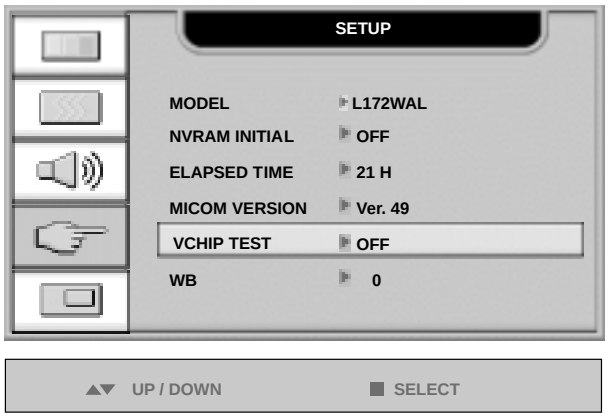
3. Select "OFF" in the NVRAM INITIAL using the left/right key to return to the factory defaults.



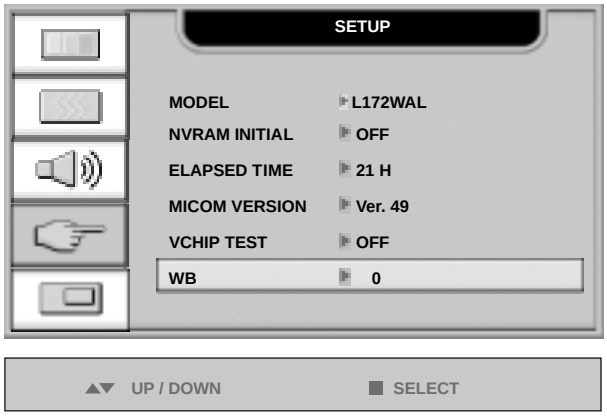
4. Shows the monitor usage time. You don't need to make any adjustment in this menu.



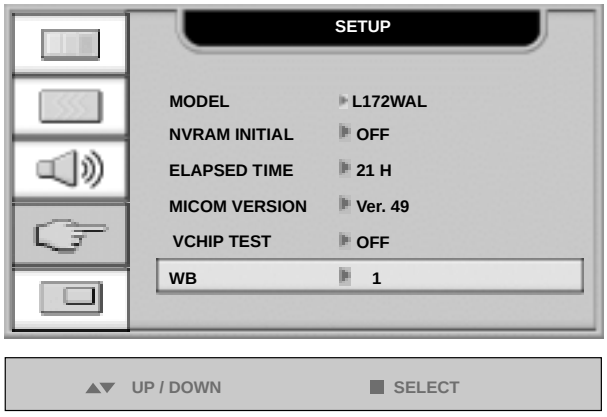
5. Shows the Micom version. You don't need to make any adjustment in this menu.



6. Use this menu to test the Vchip. When you select "OFF" using the left/right key, blocking will be initiated depending on the rating signal.



7. Use this menu to adjust white balance.
   Press the left/right key in the black screen to adjust black. The WB value can be changed from 0 to 1.



8. Press the left/right key in the white screen to adjust white. The WB value can be changed from 1 to 2.

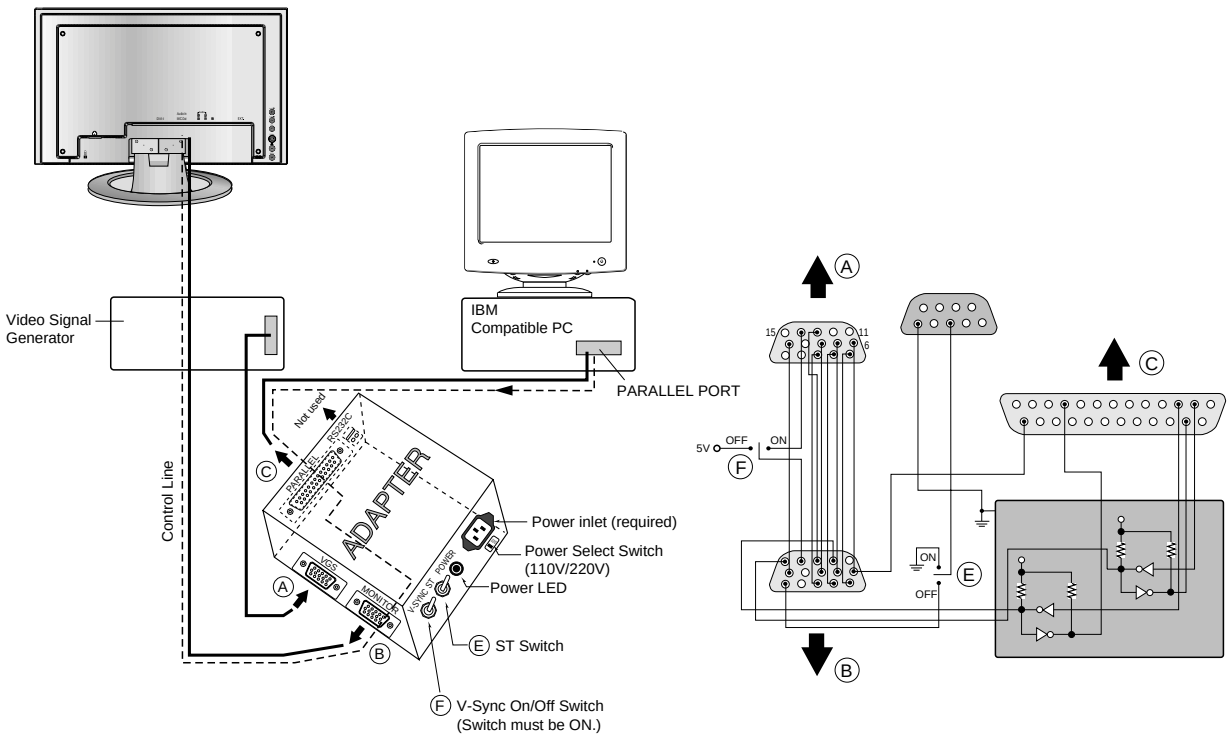
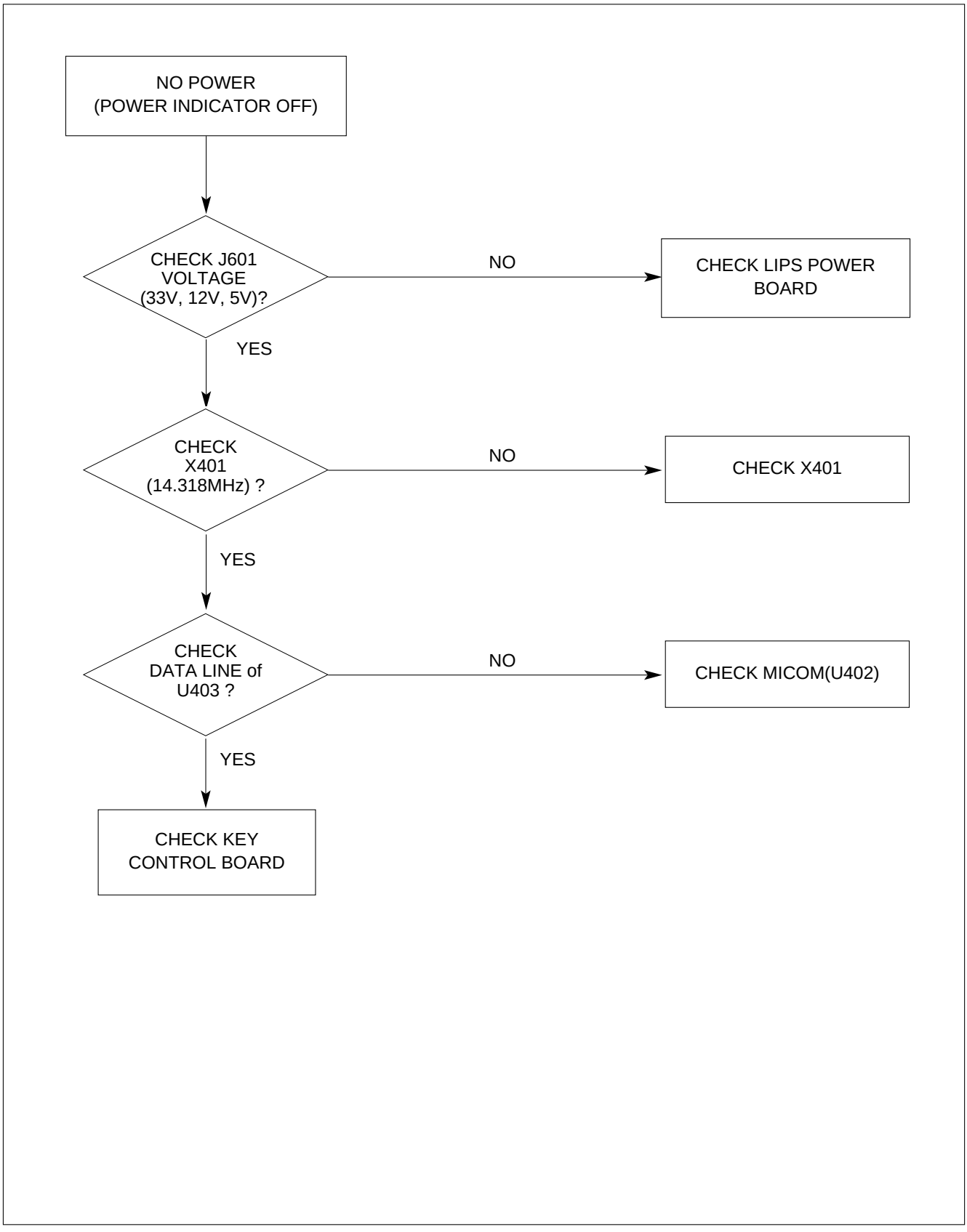


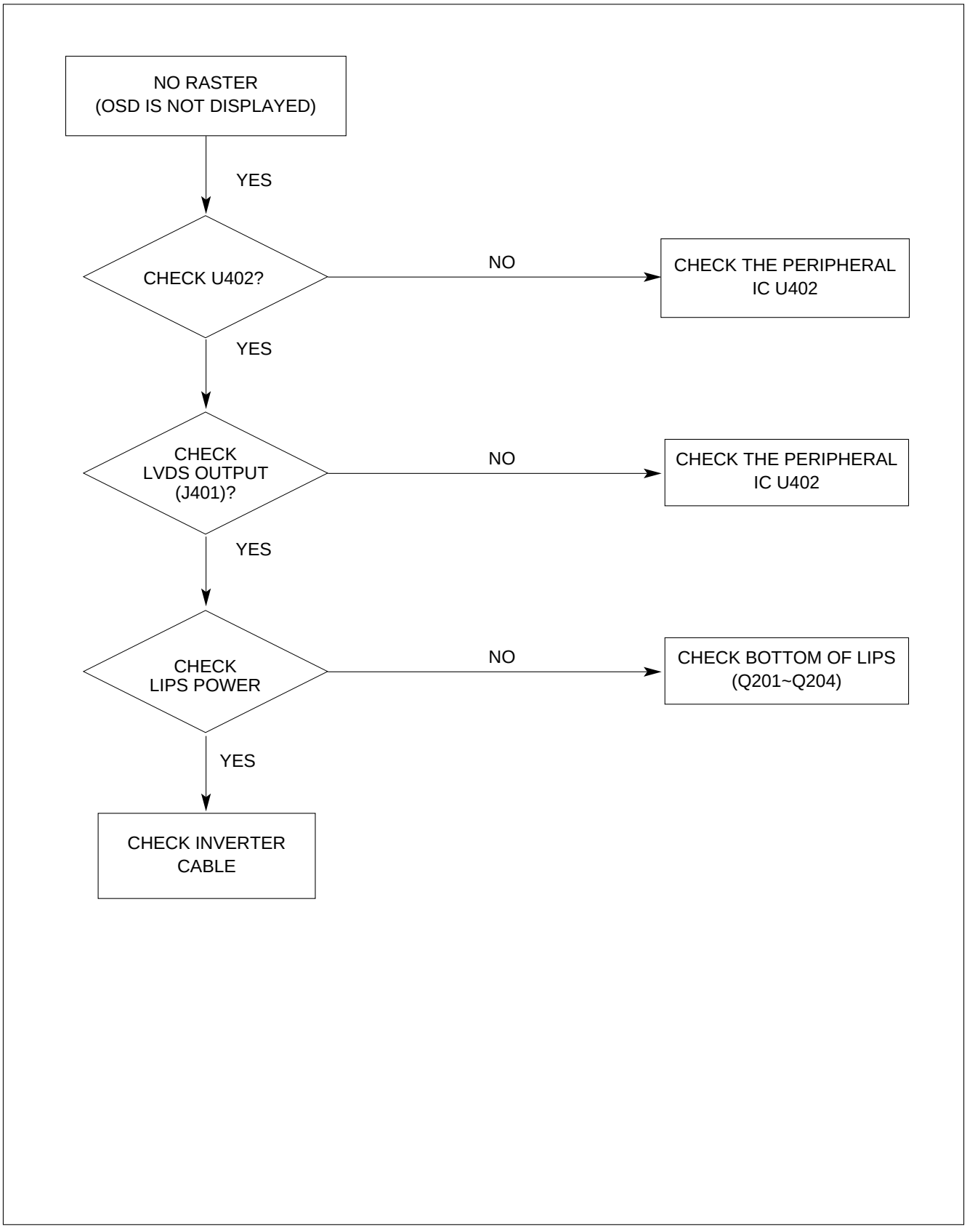
Figure 1. Cable Connection

TROUBLESHOOTING GUIDE

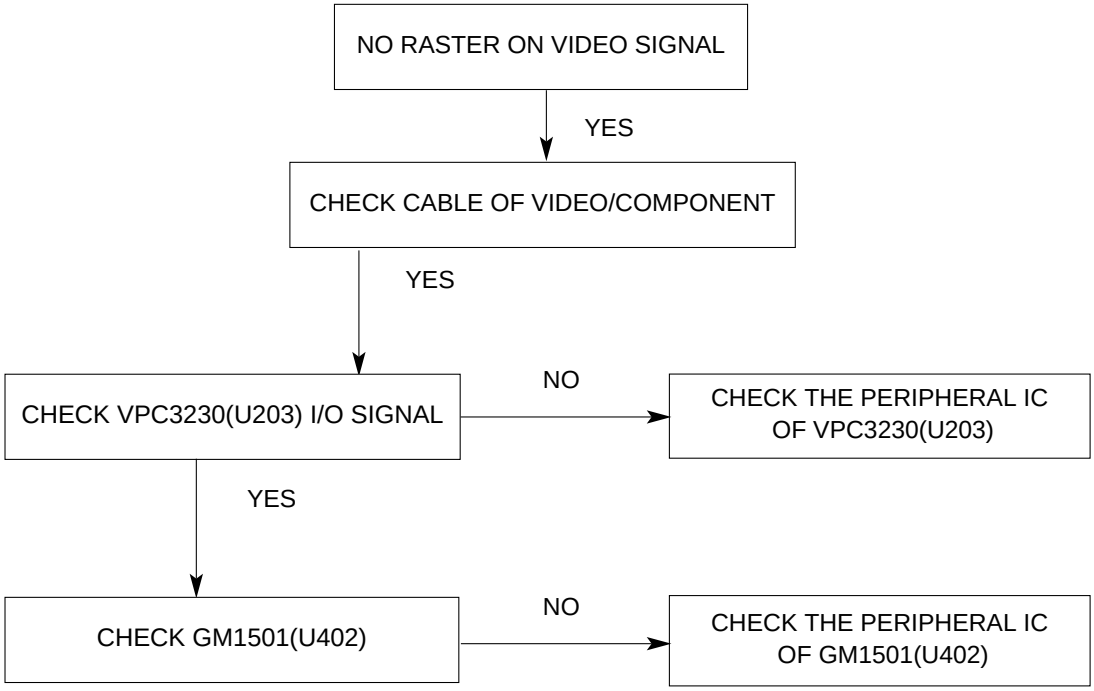
1. NO POWER



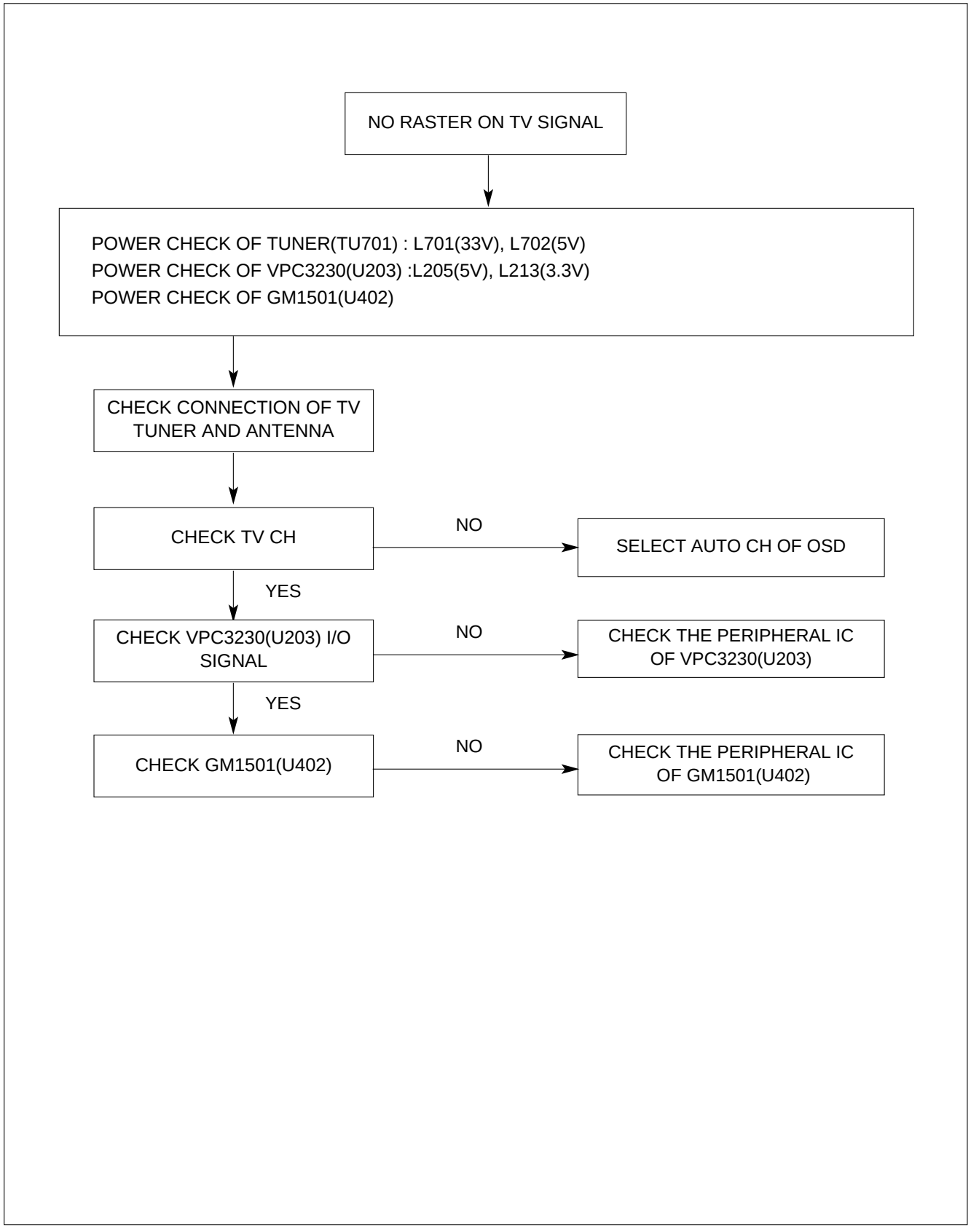
2. NO RASTER(OSD IS NOT DISPLAYED)



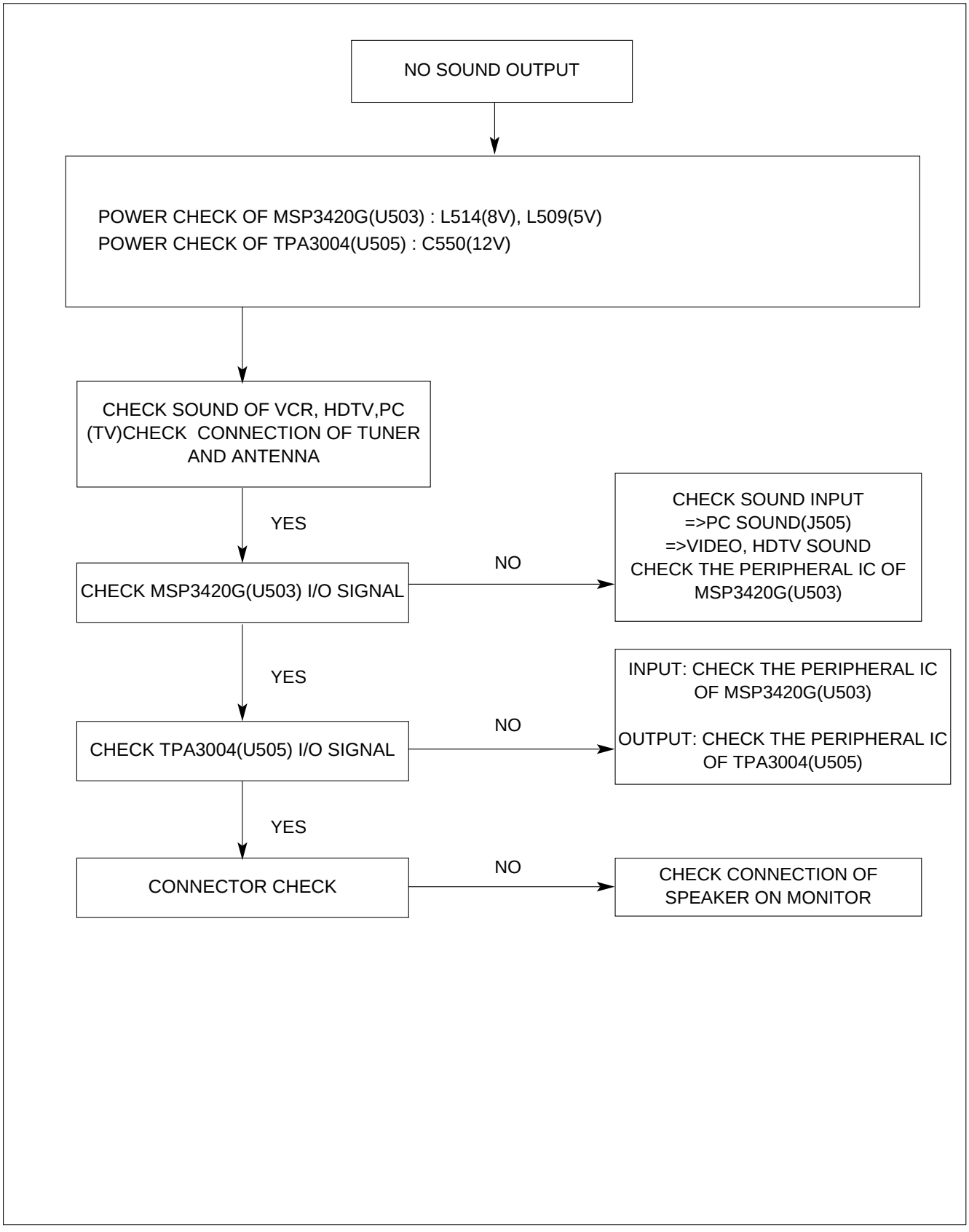
3. NO RASTER ON VIDEO SIGNAL INPUT



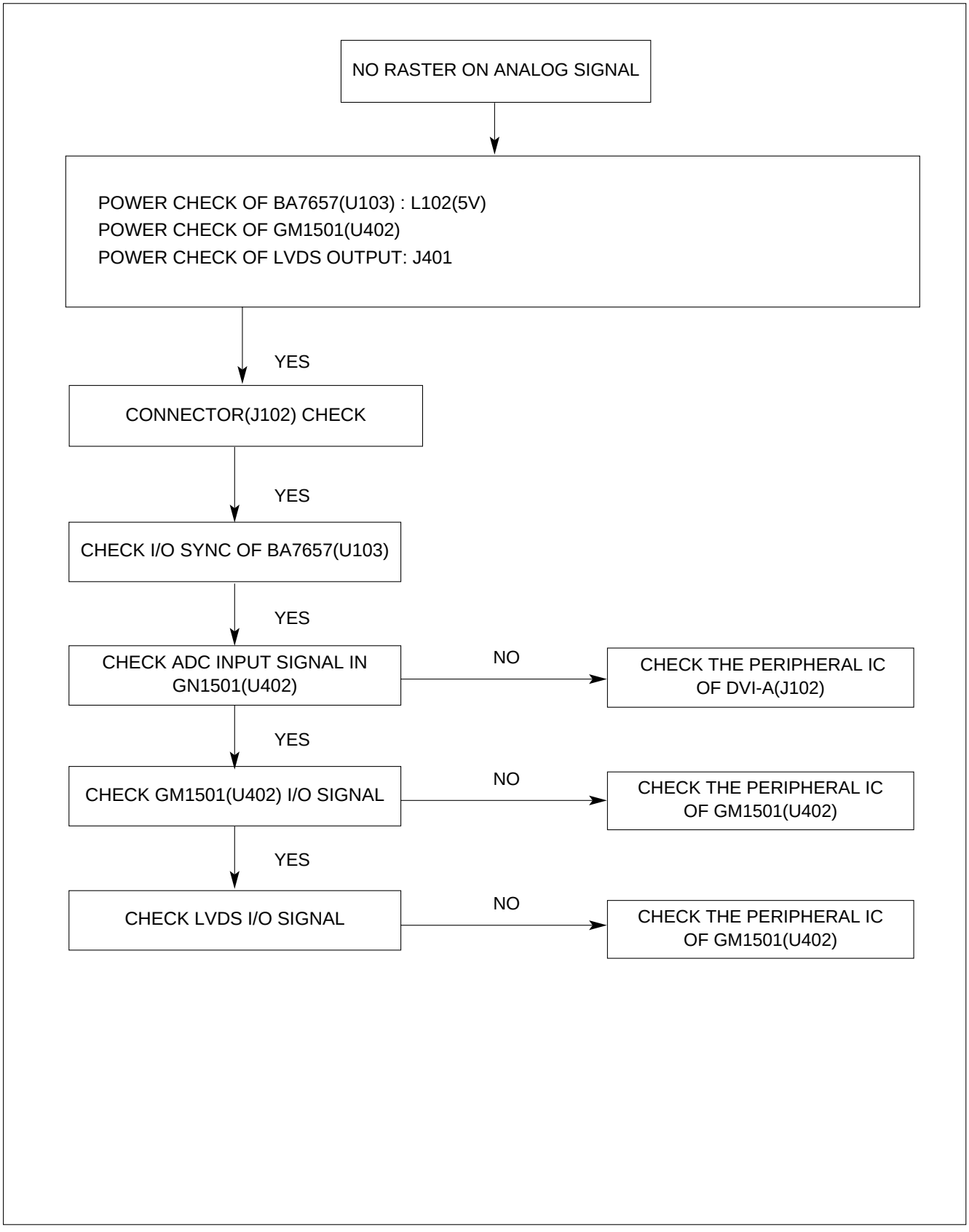
4. NO RASTER ON TV SIGNAL INPUT



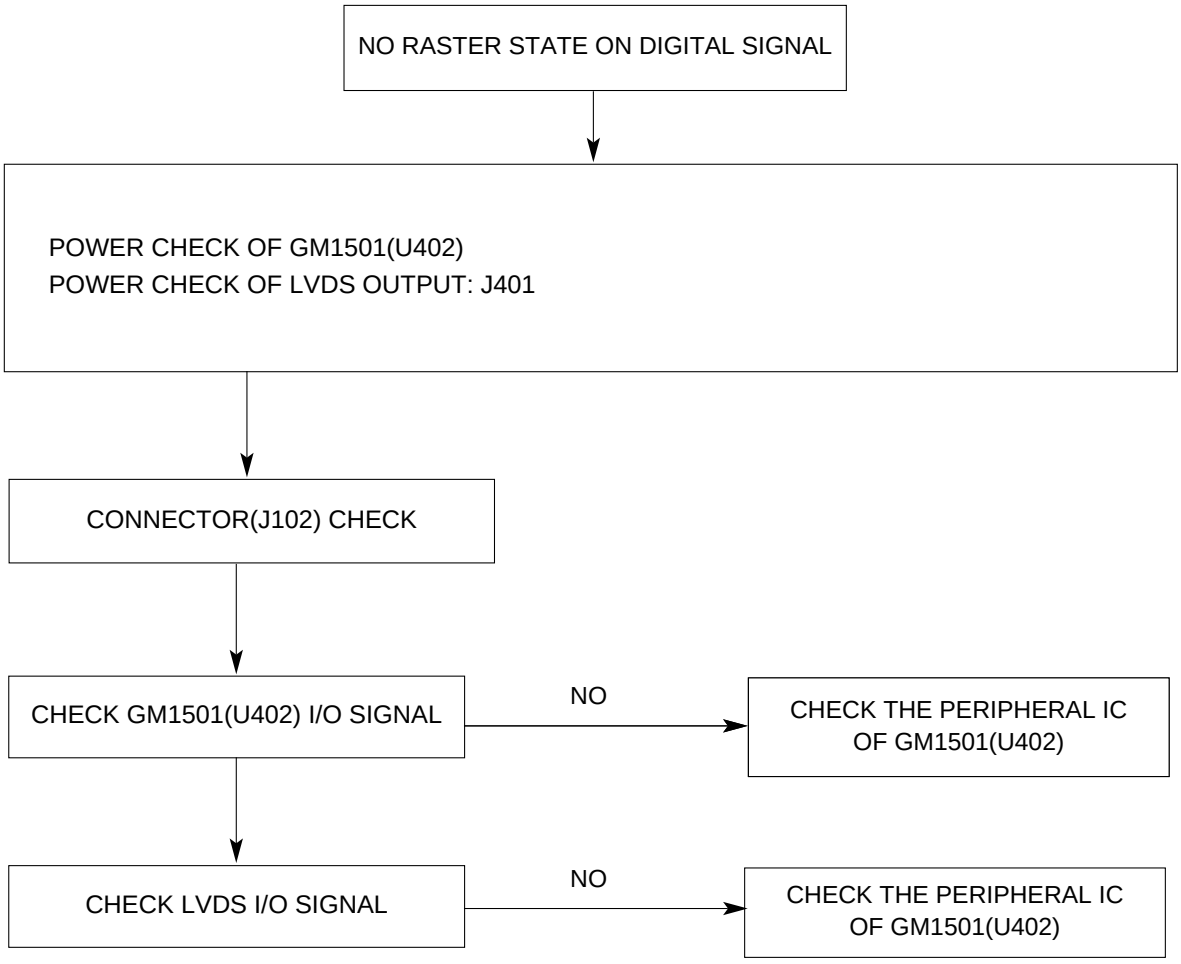
5. SOUND TROBLE SHOOTING



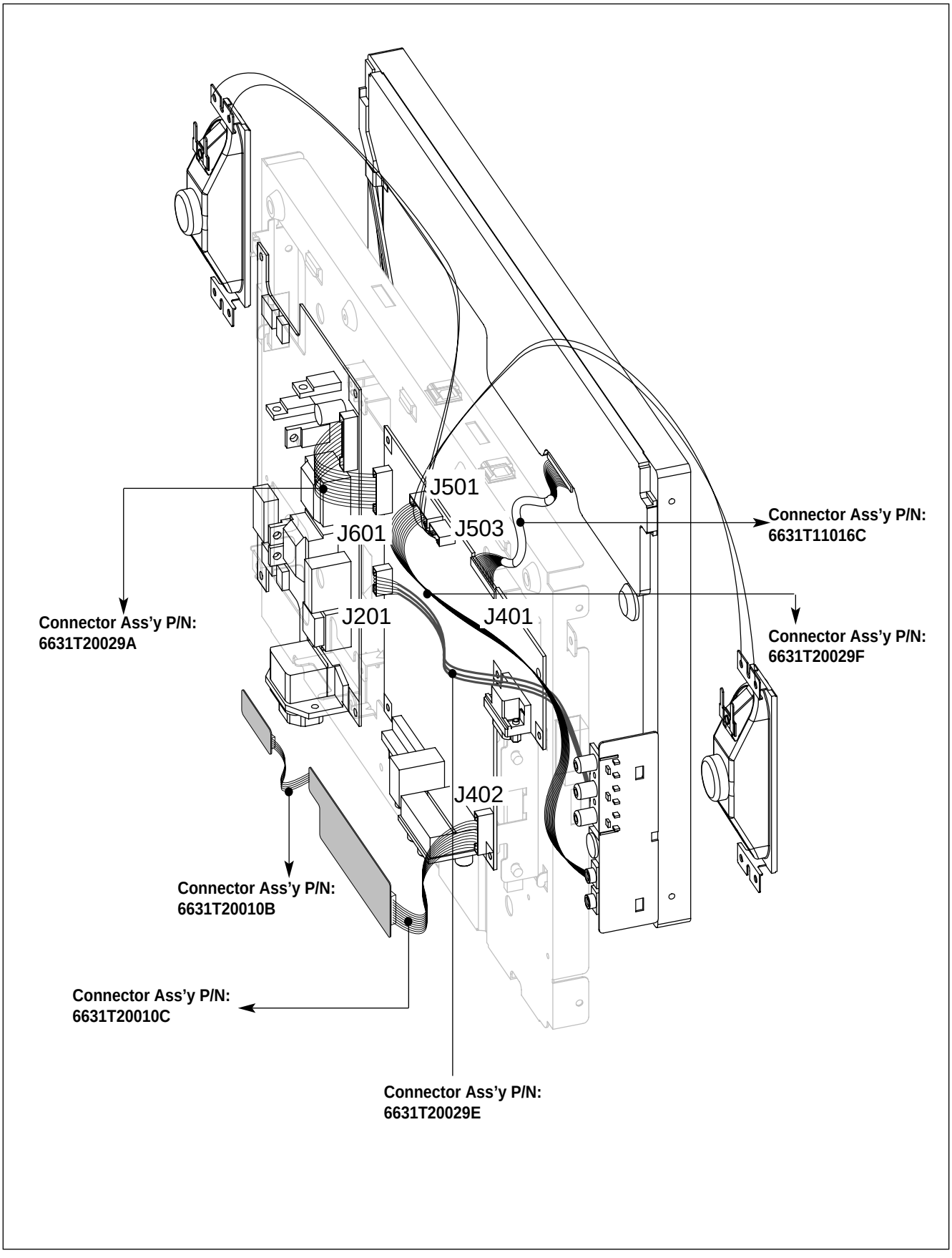
6. NO RASTER STATE ON ANALOG SIGNAL



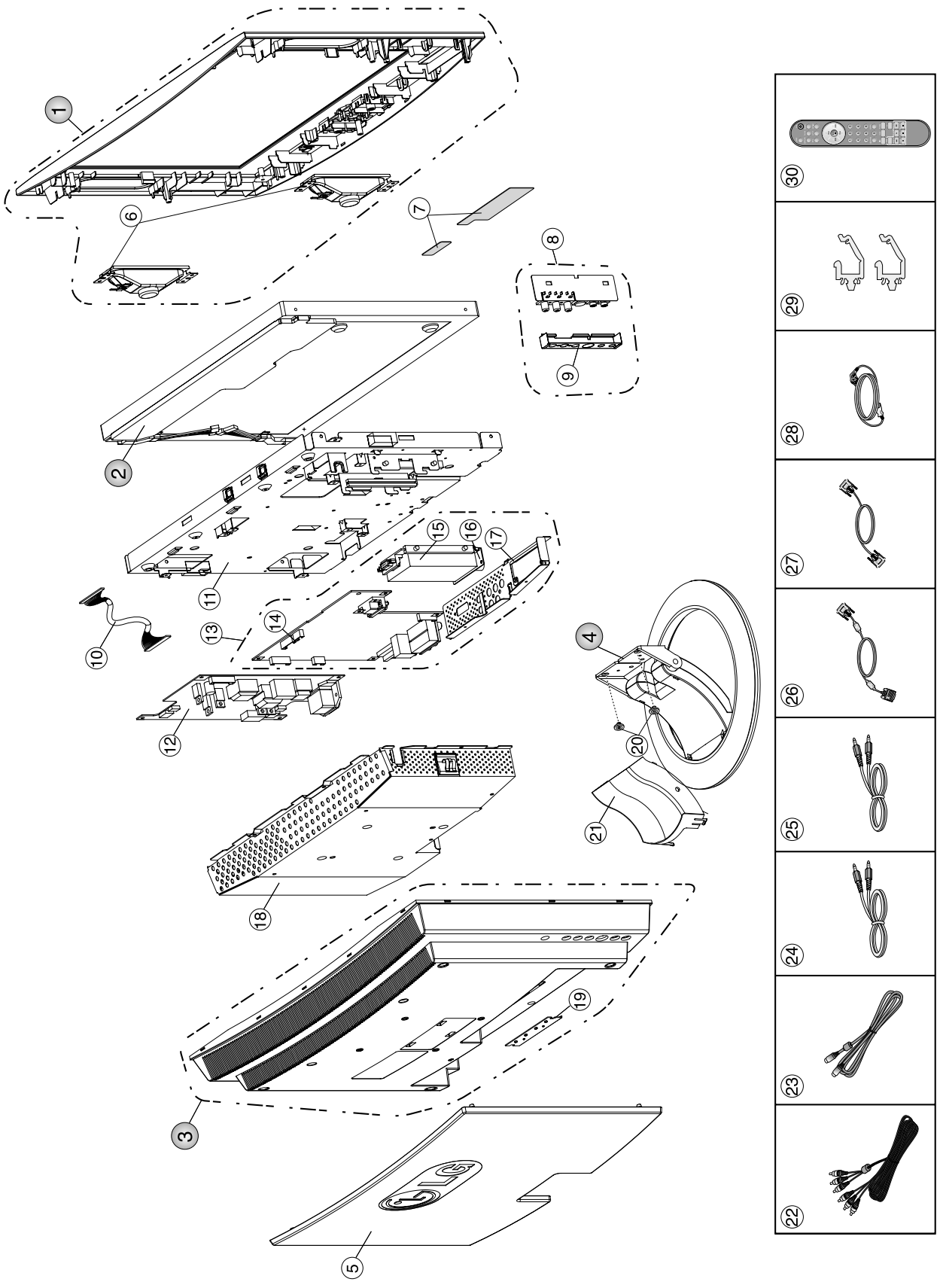
7. NO RASTER STATE ON DIGITAL SIGNAL


NO RASTER STATE ON DIGITAL SIGNAL
POWER CHECK OF GM1501(U402)
POWER CHECK OF LVDS OUTPUT: J401
CONNECTOR(J102) CHECK
CHECK GM1501(U402) I/O SIGNAL
NO
CHECK THE PERIPHERAL IC OF GM1501(U402)
CHECK LVDS I/O SIGNAL
NO
CHECK THE PERIPHERAL IC OF GM1501(U402)

WIRING DIAGRAM



EXPLODED VIEW



EXPLODED VIEW PARTS LIST

Ref. No.	Part No.	Description
1	3091TKL093B	CABINET ASSEMBLY, L172WAL BRAND L084 US PC+ABS
2	6304FLP061B	LCD(LIQUID CRYSTAL DISPLAY), LC171W03-A4K3 LG PHILPS TFT COLOR 17.1" WIDE
3	3809TKL064B	BACK COVER ASSEMBLY, L172WAL L067 US PC+ABS
4	3043TKK143A	TILT SWIVEL ASSEMBLY, L172WA K428 BRAND
5	3550TKK427B	COVER, L172WAL BACK DECORATION PC/ABS
6	6401TZZ038A	SPEAKER ASSEMBLY, L172WAL K103B081,3W,8OHM,5PIN
7	6871TST461A	PWB(PCB) ASSEMBLY, SUB, L172WAL CONTROL TOTAL BRAND CL-56
8	6871TVT365A	PWB(PCB) ASSEMBLY, VIDEO, L172WAL VIDEO TOTAL BRAND CL-56
9	4814TKK257A	SHIELD, SIDE AV-PCB L172WA
10	6631T11016C	CONNECTOR ASSEMBLY, 20P H-H 100MM UL20276 I/FACE CABLE LB500K
11	4951TKS140A	METAL ASSEMBLY, FRAME MAIN L172WA
12	6871TPT262B	PWB(PCB) ASSEMBLY, POWER, L172WAL POWER TOTAL SUNGHO BRAND 17" WIDE FOR LPL
13	3313TL7025B	MAIN TOTAL ASSEMBLY, L172WAL BRAND CL-56
14	6871TMT493B	PWB(PCB) ASSEMBLY, MAIN, L172WAL ALUST BRAND CL-56 TOTAL
15	6700NF0004B	TUNER, TAFH-HOOIP LG INOTEK NTSC FS TUNNER FOR L3020AL
16	4950TKK595A	METAL, PLATE TV TUNER
17	4951TKK164A	METAL ASSEMBLY, FIX MAIN PCB L172WA
18	4951TKK163A	METAL ASSEMBLY, REAR L172WA
19	4950TKK678A	METAL, PLATE BACK L172WA
20	4810TKK220A	BRACKET, L1801FP EMI INSERT
21	3550TKK430A	COVER, L172WA BACK STAND
22	6852TAZ006B	CORD, A/V, RCA CABLE UL2863 AWG28 3000MM BLACK(9930) DH-3P-N300C LM295B
23	6852TAZ006D	CORD, A/V, DIN CABLE UL 2990-9C(5.5) 1560MM BLACK(9930) DH-150DIN LM295B
24	6852TAZ006K	CORD, A/V, A/V KHC-ST-3-0001 UL 2851 #28-2C 1560MM GRAY(85964) KSD PINK-PINK
25	6852TAZ006N	CORD, A/V, A/V KCA-ST-3-0011 UL2851 AWG28 1560MM GRAY(85964) LIME-L/BLUE WITH CORE L2320AL
26	6866TDV001E	CABLE, DVI, UL2990 DT 2000MM BLACK(9930) L172WAL DM
27	6866TDV004C	CABLE, DVI, UL20276 DT 2000MM GRAY(85964) LB885C DM
28	6410TUW002B	POWER CORD, SP305+IS14 I-SHENG UL/CSA 1870MM WALL 85964 GRAY
29	4930TKK048A	HOLDER, CABLE L16.5*H10
30	6710T00003G	REMOTE CONTROLLER, L3020AL ALUST NTSC 30" AV/TV

REPLACEMENT PARTS LIST

CAUTION: BEFORE REPLACING ANY OF THESE COMPONENTS,
READ CAREFULLY THE **SAFETY PRECAUTIONS** IN THIS MANUAL.
* NOTE : **S** SAFETY Mark ⚠
AL ALTERNATIVE PARTS

DATE: 2003. 12. 15.

*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		MAIN BOARD		
		CAPACITORS		
		C101	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C103	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C104	0CK224CF56A	0.22UF 1608 16V 10% R/TP X7R
		C105	0CK224CF56A	0.22UF 1608 16V 10% R/TP X7R
		C106	0CK224CF56A	0.22UF 1608 16V 10% R/TP X7R
		C107	0CC331CK41A	330PF 1608 50V 5% R/TP NP0
		C108	0CK224CF56A	0.22UF 1608 16V 10% R/TP X7R
		C109	0CK224CF56A	0.22UF 1608 16V 10% R/TP X7R
		C110	0CK224CF56A	0.22UF 1608 16V 10% R/TP X7R
		C111	0CK224CF56A	0.22UF 1608 16V 10% R/TP X7R
		C112	0CC331CK41A	330PF 1608 50V 5% R/TP NP0
		C113	0CC331CK41A	330PF 1608 50V 5% R/TP NP0
		C114	0CK224CF56A	0.22UF 1608 16V 10% R/TP X7R
		C115	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y5
		C116	0CH6101K416	100PF 50V J NP0 2012 R/TP
		C118	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y5
		C119	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C120	0CH6101K416	100PF 50V J NP0 2012 R/TP
		C121	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C122	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C123	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C124	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C125	0CC101CK41A	100PF 1608 50V 5% R/TP NP0
		C126	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C127	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C128	0CK224CF56A	0.22UF 1608 16V 10% R/TP X7R
		C129	0CK224CF56A	0.22UF 1608 16V 10% R/TP X7R
		C130	0CK224CF56A	0.22UF 1608 16V 10% R/TP X7R
		C131	0CK224CF56A	0.22UF 1608 16V 10% R/TP X7R
		C132	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y5
		C134	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y5
		C139	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y5
		C142	0CH8476F691	47UF 16V 20% 105STD (CYL) R/T
		C143	0CH8476F691	47UF 16V 20% 105STD (CYL) R/T
		C144	0CH8476F691	47UF 16V 20% 105STD (CYL) R/T
		C145	0CH8476F691	47UF 16V 20% 105STD (CYL) R/T
		C146	0CH8476F691	47UF 16V 20% 105STD (CYL) R/T
		C153	0CH8476F691	47UF 16V 20% 105STD (CYL) R/T
		C154	0CH8476F691	47UF 16V 20% 105STD (CYL) R/T
		C157	0CH3103K516	10000PF 50V 10% B(Y5P) 2012 R
		C158	0CH3103K516	10000PF 50V 10% B(Y5P) 2012 R
		C159	0CH3103K516	10000PF 50V 10% B(Y5P) 2012 R
		C160	0CH3103K516	10000PF 50V 10% B(Y5P) 2012 R
		C161	0CH3103K516	10000PF 50V 10% B(Y5P) 2012 R
		C162	0CH3103K516	10000PF 50V 10% B(Y5P) 2012 R
		C163	0CK474CH94A	0.47UF 1608 25V 80%,-20% R/TP
		C164	0CH6471K416	470F 50V J NP0 2012 R/TP
		C179	0CE477EF610	470UF KMG,RD 16V 20% BULK FL
		C180	0CE106CK610	10UF SHL,SD 50V 20% BULK FL
		C184	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C201	0CC120CK41A	12PF 1608 50V 5% R/TP NP0
		C202	0CC331CK41A	330PF 1608 50V 5% R/TP NP0

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*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		C203	0CK474CH94A	0.47UF 1608 25V 80%,-20% R/TP
		C204	0CC120CK41A	12PF 1608 50V 5% R/TP NP0
		C205	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C206	0CK105CF94A	1UF 1608 16V 80%,-20% R/TP F(
		C207	0CK473CK56A	47000PF 1608 50V 10% R/TP X7R
		C208	0CC331CK41A	330PF 1608 50V 5% R/TP NP0
		C209	0CK474CH94A	0.47UF 1608 25V 80%,-20% R/TP
		C210	0CK473CK56A	47000PF 1608 50V 10% R/TP X7R
		C211	0CC331CK41A	330PF 1608 50V 5% R/TP NP0
		C212	0CC180CK41A	18PF 1608 50V 5% R/TP NP0
		C213	0CH8106F691	10UF 16V 20% 105STD (CYL) R/T
		C214	0CC180CK41A	18PF 1608 50V 5% R/TP NP0
		C215	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C216	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C217	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C218	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C219	0CK152CK51A	1500PF 1608 50V 10% R/TP B(Y5
		C220	0CH8106F691	10UF 16V 20% 105STD (CYL) R/T
		C221	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C222	0CK472CK51A	4700PF 1608 50V 10% R/TP B(Y5
		C223	0CC391CK41A	390PF 1608 50V 5% NP0 R/TP
		C224	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C225	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C226	0CK152CK51A	1500PF 1608 50V 10% R/TP B(Y5
		C227	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y5
		C228	0CK224CF56A	0.22UF 1608 16V 10% R/TP X7R
		C229	0CC331CK41A	330PF 1608 50V 5% R/TP NP0
		C231	0CH6152K406	1500PF 50V J SL 2012 R/TP
		C232	0CK474CH94A	0.47UF 1608 25V 80%,-20% R/TP
		C233	0CH3472K516	4700PF 50V K B 2012 R/TP
		C234	0CH8106F691	10UF 16V 20% 105STD (CYL) R/T
		C235	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C236	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C237	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C238	0CH8476F691	47UF 16V 20% 105STD (CYL) R/T
		C239	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y5
		C240	0CC100CK41A	10PF 1608 50V 5% R/TP NP0
		C242	0CK474CH94A	0.47UF 1608 25V 80%,-20% R/TP
		C243	0CC331CK41A	330PF 1608 50V 5% R/TP NP0
		C245	0CK474CH94A	0.47UF 1608 25V 80%,-20% R/TP
		C246	0CC681CK41A	680PF 1608 50V 5% NP0 R/TP
		C247	0CC391CK41A	390PF 1608 50V 5% NP0 R/TP
		C248	0CK152CK51A	1500PF 1608 50V 10% R/TP B(Y5
		C249	0CK224CF56A	0.22UF 1608 16V 10% R/TP X7R
		C251	0CK474CH94A	0.47UF 1608 25V 80%,-20% R/TP
		C252	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C253	0CC100CK41A	10PF 1608 50V 5% R/TP NP0
		C254	0CK472CK51A	4700PF 1608 50V 10% R/TP B(Y5
		C255	0CC391CK41A	390PF 1608 50V 5% NP0 R/TP
		C256	0CC101CK41A	100PF 1608 50V 5% R/TP NP0
		C257	0CC101CK41A	100PF 1608 50V 5% R/TP NP0
		C259	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C260	0CC101CK41A	100PF 1608 50V 5% R/TP NP0
		C261	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R

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*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		C262	0CK105CF94A	1UF 1608 16V 80%,-20% R/TP F(
		C266	0CK472CK51A	4700PF 1608 50V 10% R/TP B(Y5
		C267	0CK105CF94A	1UF 1608 16V 80%,-20% R/TP F(
		C268	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C269	0CK152CK51A	1500PF 1608 50V 10% R/TP B(Y5
		C270	0CK224CF56A	0.22UF 1608 16V 10% R/TP X7R
		C271	0CH8226F691	22UF 16V 20% 105STD (CYL) R/T
		C272	0CH8476F691	47UF 16V 20% 105STD (CYL) R/T
		C273	0CK474CH94A	0.47UF 1608 25V 80%,-20% R/TP
		C274	0CK473CK56A	47000PF 1608 50V 10% R/TP X7R
		C275	0CC331CK41A	330PF 1608 50V 5% R/TP NP0
		C276	0CH6201K416	200PF 50V J NP0 2012 R/TP
		C277	0CH6201K416	200PF 50V J NP0 2012 R/TP
		C278	0CC561CK41A	560PF 1608 50V 5% NP0 R/TP
		C284	0CC101CK41A	100PF 1608 50V 5% R/TP NP0
		C285	0CC101CK41A	100PF 1608 50V 5% R/TP NP0
		C289	0CH6102K406	1000PF 50V J SL 2012 R/TP
		C292	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C293	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C294	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C295	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C296	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C369	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C370	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C401	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C402	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C403	0CC102CK41A	1000PF 1608 50V 5% R/TP NP0
		C404	0CC102CK41A	1000PF 1608 50V 5% R/TP NP0
		C405	0CC102CK41A	1000PF 1608 50V 5% R/TP NP0
		C406	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C407	0CH8226F691	22UF 16V 20% 105STD (CYL) R/T
		C408	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C409	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C412	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C413	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C414	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C415	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C416	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C417	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C418	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C420	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C424	0CC220CK41A	22PF 1608 50V 5% R/TP NP0
		C425	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C426	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C427	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C429	0CC150CK41A	15PF 1608 50V 5% R/TP NP0
		C430	0CH8475J611	4.7UF 35V M 85STD(CYL) R/TP
		C435	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C459	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C460	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C461	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C462	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C464	0CC220CK41A	22PF 1608 50V 5% R/TP NP0
		C468	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C469	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C470	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C471	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C472	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C473	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C474	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C475	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C476	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP

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		C477	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C478	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C479	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C480	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C481	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C482	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C483	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C484	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C487	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C488	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C489	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C490	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C491	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C492	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C493	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C494	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C495	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C496	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C497	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C498	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C499	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C501	0CK224CF56A	0.22UF 1608 16V 10% R/TP X7R
		C502	0CE475EK638	4.7UF KMG 50V 20% FM5 TP 5
		C503	0CE227EF638	220UF KMG,RD 16V 20% TP 5 FM5
		C504	0CE227EF638	220UF KMG,RD 16V 20% TP 5 FM5
		C505	0CK474CH94A	0.47UF 1608 25V 80%,-20% R/TP
		C506	0CK224CF56A	0.22UF 1608 16V 10% R/TP X7R
		C507	0CK224CF56A	0.22UF 1608 16V 10% R/TP X7R
		C508	0CC471CK41A	470PF 1608 50V 5% R/TP NP0
		C509	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C510	0CC471CK41A	470PF 1608 50V 5% R/TP NP0
		C512	0CK562CK51A	5600PF 1608 50V 10% R/TP B(Y5
		C513	0CK105CF94A	1UF 1608 16V 80%,-20% R/TP F(
		C514	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y5
		C515	0CK562CK51A	5600PF 1608 50V 10% R/TP B(Y5
		C516	0CK562CK51A	5600PF 1608 50V 10% R/TP B(Y5
		C517	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C518	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y5
		C519	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y5
		C520	0CK562CK51A	5600PF 1608 50V 10% R/TP B(Y5
		C523	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C524	0CC221CK41A	220PF 1608 50V 5% R/TP NP0
		C525	0CE226EK610	22UF KMG,RD 50V 20% FL BULK
		C526	0CK105CF94A	1UF 1608 16V 80%,-20% R/TP F(
		C527	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C528	0CH8476F691	47UF 16V 20% 105STD (CYL) R/T
		C529	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C531	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C540	0CH8106F691	10UF 16V 20% 105STD (CYL) R/T
		C541	0CK224CF56A	0.22UF 1608 16V 10% R/TP X7R
		C542	0CK224CF56A	0.22UF 1608 16V 10% R/TP X7R
		C548	0CK224CF56A	0.22UF 1608 16V 10% R/TP X7R
		C549	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y5
		C550	0CE226EK610	22UF KMG,RD 50V 20% FL BULK
		C551	0CH6471K416	470F 50V J NP0 2012 R/TP
		C553	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C554	0CH6471K416	470F 50V J NP0 2012 R/TP
		C556	0CC101CK41A	100PF 1608 50V 5% R/TP NP0
		C557	0CC3R3CK01A	3.3PF 1608 50V 0.25 PF R/TP N
		C558	0CC560CK41A	56PF 1608 50V 5% R/TP NP0
		C559	0CC560CK41A	56PF 1608 50V 5% R/TP NP0
		C560	0CC560CK41A	56PF 1608 50V 5% R/TP NP0

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		C561	0CC3R3CK01A	3.3PF 1608 50V 0.25 PF R/TP N
		C562	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C565	0CH8476F691	47UF 16V 20% 105STD (CYL) R/T
		C566	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C569	0CK332CK51A	3300PF 1608 50V 10% R/TP B(Y5
		C570	0CK332CK51A	3300PF 1608 50V 10% R/TP B(Y5
		C572	0CH8476F691	47UF 16V 20% 105STD (CYL) R/T
		C573	0CH8106F691	10UF 16V 20% 105STD (CYL) R/T
		C574	0CH8106F691	10UF 16V 20% 105STD (CYL) R/T
		C576	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C577	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y5
		C578	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C579	0CK105CF94A	1UF 1608 16V 80%,-20% R/TP F(
		C580	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C581	0CK105CF94A	1UF 1608 16V 80%,-20% R/TP F(
		C587	0CE226EK610	22UF KMG,RD 50V 20% FL BULK
		C588	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C589	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C590	0CK105CF94A	1UF 1608 16V 80%,-20% R/TP F(
		C591	0CK105CF94A	1UF 1608 16V 80%,-20% R/TP F(
		C592	0CK105CF94A	1UF 1608 16V 80%,-20% R/TP F(
		C593	0CK105CF94A	1UF 1608 16V 80%,-20% R/TP F(
		C594	0CK105CF94A	1UF 1608 16V 80%,-20% R/TP F(
		C598	0CC471CK41A	470PF 1608 50V 5% R/TP NP0
		C599	0CC471CK41A	470PF 1608 50V 5% R/TP NP0
		C601	0CE477EF610	470UF KMG,RD 16V 20% BULK FL
		C602	0CH3103K516	10000PF 50V 10% B(Y5P) 2012 R
		C603	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C604	0CH3103K516	10000PF 50V 10% B(Y5P) 2012 R
		C605	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C606	0CE477EF610	470UF KMG,RD 16V 20% BULK FL
		C607	0CE107WF6DC	100UF MVK 16V 20% R/TP(SMD) S
		C608	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y5
		C609	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C610	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y5
		C611	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C612	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y5
		C613	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C614	0CE477EF610	470UF KMG,RD 16V 20% BULK FL
		C615	0CE227EF638	220UF KMG,RD 16V 20% TP 5 FM5
		C616	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C617	0CE477EF610	470UF KMG,RD 16V 20% BULK FL
		C618	0CE477EF610	470UF KMG,RD 16V 20% BULK FL
		C619	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C623	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C624	0CE227EF638	220UF KMG,RD 16V 20% TP 5 FM5
		C625	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C630	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C631	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y5
		C632	0CH8226F691	22UF 16V 20% 105STD (CYL) R/T
		C633	0CH8226F691	22UF 16V 20% 105STD (CYL) R/T
		C635	0CE107WF6DC	100UF MVK 16V 20% R/TP(SMD) S
		C637	0CH8226F691	22UF 16V 20% 105STD (CYL) R/T
		C639	0CK103CK51A	0.01UF 1608 50V 10% R/TP B(Y5
		C640	0CE107WF6DC	100UF MVK 16V 20% R/TP(SMD) S
		C641	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C642	0CH8226F691	22UF 16V 20% 105STD (CYL) R/T
		C644	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C645	0CE107WF6DC	100UF MVK 16V 20% R/TP(SMD) S
		C648	0CH8226F691	22UF 16V 20% 105STD (CYL) R/T
		C649	0CH8226F691	22UF 16V 20% 105STD (CYL) R/T
		C652	0CE227EF638	220UF KMG,RD 16V 20% TP 5 FM5

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		C653	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C654	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C655	0CH8226F691	22UF 16V 20% 105STD (CYL) R/T
		C657	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C670	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C672	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C673	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C690	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C691	0CE107WF6DC	100UF MVK 16V 20% R/TP(SMD) S
		C694	0CK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C701	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C702	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C703	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C705	0CH6100K116	10PF 50V D NP0 2012 R/TP
		C706	0CH6100K116	10PF 50V D NP0 2012 R/TP
		C707	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C708	0CH3105F946	1UF 16V Z F 2012 R/TP
		C709	0CH3105F946	1UF 16V Z F 2012 R/TP
		C710	0CH3105F946	1UF 16V Z F 2012 R/TP
		C711	0CH3105F946	1UF 16V Z F 2012 R/TP
		C712	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C714	0CE106CK610	10UF SHL,SD 50V 20% BULK FL
		C715	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C716	0CE107EF610	100UF KMG,RD 16V 20% FL BULK
		C717	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C718	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C719	0CH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		DIODEs		
		D101	0DS226009AA	KDS226 TP KEC SOT-23 80V 300
		D102	0DS226009AA	KDS226 TP KEC SOT-23 80V 300
		D110	0DS226009AA	KDS226 TP KEC SOT-23 80V 300
		D111	0DS226009AA	KDS226 TP KEC SOT-23 80V 300
		D112	0DS226009AA	KDS226 TP KEC SOT-23 80V 300
		D113	0DS226009AA	KDS226 TP KEC SOT-23 80V 300
		D114	0DS226009AA	KDS226 TP KEC SOT-23 80V 300
		D115	0DS226009AA	KDS226 TP KEC SOT-23 80V 300
		D121	0DS226009AA	KDS226 TP KEC SOT-23 80V 300
		D122	0DS226009AA	KDS226 TP KEC SOT-23 80V 300
		D123	0DS226009AA	KDS226 TP KEC SOT-23 80V 300
		D124	0DS226009AA	KDS226 TP KEC SOT-23 80V 300
		D125	0DS226009AA	KDS226 TP KEC SOT-23 80V 300
		D128	0DS226009AA	KDS226 TP KEC SOT-23 80V 300
		D501	0DS226009AA	KDS226 TP KEC SOT-23 80V 300
		D502	0DS226009AA	KDS226 TP KEC SOT-23 80V 300
		D503	0DS226009AA	KDS226 TP KEC SOT-23 80V 300
		D601	0DS226009AA	KDS226 TP KEC SOT-23 80V 300
		D701	0DS226009AA	KDS226 TP KEC SOT-23 80V 300
		D702	0DS226009AA	KDS226 TP KEC SOT-23 80V 300
		D703	0DS226009AA	KDS226 TP KEC SOT-23 80V 300
		ZD101	0DZ560009DA	UDZ S 5.6B TP ROHM-K SOD323 2
		ZD102	0DZ560009DA	UDZ S 5.6B TP ROHM-K SOD323 2
		ZD103	0DZ560009DA	UDZ S 5.6B TP ROHM-K SOD323 2
		ZD117	0DZ560009DA	UDZ S 5.6B TP ROHM-K SOD323 2
		ZD118	0DZ560009DA	UDZ S 5.6B TP ROHM-K SOD323 2
		ZD401	0DZ910009FE	UDZS 9.1B TP ROHM - - 9.1V -
		ZD501	0DZ560009DA	UDZ S 5.6B TP ROHM-K SOD323 2
		ZD502	0DZ560009DA	UDZ S 5.6B TP ROHM-K SOD323 2
		ZD505	0DZ560009DA	UDZ S 5.6B TP ROHM-K SOD323 2
		ZD506	0DZ560009DA	UDZ S 5.6B TP ROHM-K SOD323 2
		ZD507	0DZ560009DA	UDZ S 5.6B TP ROHM-K SOD323 2

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		ZD508	0DZ560009DA	UDZ S 5.6B TP ROHM-K SOD323 2
		ZD509	0DZ560009DA	UDZ S 5.6B TP ROHM-K SOD323 2
		ZD510	0DZ560009DA	UDZ S 5.6B TP ROHM-K SOD323 2
		ZD511	0DZ560009DA	UDZ S 5.6B TP ROHM-K SOD323 2
		ZD512	0DZ560009DA	UDZ S 5.6B TP ROHM-K SOD323 2
		ZD513	0DZ560009DA	UDZ S 5.6B TP ROHM-K SOD323 2
		ZD514	0DZ560009DA	UDZ S 5.6B TP ROHM-K SOD323 2
		ZD515	0DZ560009DA	UDZ S 5.6B TP ROHM-K SOD323 2
		ZD516	0DZ560009DA	UDZ S 5.6B TP ROHM-K SOD323 2
		ZD701	0DZ560009DA	UDZ S 5.6B TP ROHM-K SOD323 2
		ZD702	0DZ560009DA	UDZ S 5.6B TP ROHM-K SOD323 2
		ZD703	0DZ560009DA	UDZ S 5.6B TP ROHM-K SOD323 2
		ZD704	0DZ560009DA	UDZ S 5.6B TP ROHM-K SOD323 2
		ZD705	0DZ560009DA	UDZ S 5.6B TP ROHM-K SOD323 2
ICs				
		U101	0ISS524202B	S524A40X21(SCT0) SAMSUNG ELEC
		U102	0ISS524202B	S524A40X21(SCT0) SAMSUNG ELEC
		U103	0IRH765700B	BA7657F 24P,SOP TP INPUT SIG.
		U104	0IMO140662A	MC14066BDR2 14P,SOIC TP BILAT
		U110	0DRCE00018A	PACDN004 CAMD R/TP SOT143 5V
		U111	0DRCE00018A	PACDN004 CAMD R/TP SOT143 5V
		U112	0DRCE00018A	PACDN004 CAMD R/TP SOT143 5V
		U113	0DRCE00018A	PACDN004 CAMD R/TP SOT143 5V
		U114	0DRCE00018A	PACDN004 CAMD R/TP SOT143 5V
		U115	0DRCE00018A	PACDN004 CAMD R/TP SOT143 5V
		U116	0DRCE00018A	PACDN004 CAMD R/TP SOT143 5V
		U117	0DRCE00018A	PACDN004 CAMD R/TP SOT143 5V
		U118	0DRCE00018A	PACDN004 CAMD R/TP SOT143 5V
		U119	0DRCE00018A	PACDN004 CAMD R/TP SOT143 5V
		U120	0DRCE00018A	PACDN004 CAMD R/TP SOT143 5V
		U121	0DRCE00018A	PACDN004 CAMD R/TP SOT143 5V
		U202	0IZZTSZ302A	MITSUBISHI 52P SDIP ST V-CHIP
		U203	0IIT323000E	VPC3230D C5 80P QFP TRAY VIDE
		U401	0IMMRHY051A	HY5DU283222AQ-4 HYNIX 100P,LQ
		U402	0IPRPGN011A	GM1501 GENESIS 406P, TRAY UXG
		U403	0IZZTSZ350B	MACRONIX 32 PIN PLCC ST FLASH
		U403	6620F00017A	CCSD-32T-SM WOOYOUNG 32P PLCC
		U404	0IMMRSS040C	S524A60X51(SCT0) SAMSUNG ELEC
		U407	0ISTLFA058A	74F14SCX FAIRCHILD 14P,SOIC R
		U501	0IPRPTI034A	TPA6110 TEXAS INSTRUMENT 8P,S
		U503	0IPRPMN001A	MSP3420G MICRONAS 80,PQFP TRA
		U505	0IPRPTI036A	TPA3004D2PHPR TEXAS INSTRUMEN
		U601	0ISS780500H	KA78M05-R 3P,D-PAK TP 5V 0.5A
		U603	0TFIR80009B	IRF7316 INTERNATIONAL RECTIFI
		U604	0TFIR80009A	INTERNATIONAL RECTIFIER IRF73
		U605	0IPMGFA003B	RC1117S-2.5 FAIRCHILD SOT-223
		U606	0ISS780800J	KA78M08R 3P,D-PAK TP VOL. REG
		U607	0IPMGFA003D	FAN1117AS-1.8 FAIRCHILD 4P SO
		U608	0IRH033200A	BA033FP-E2 MOLD-3 TP REGULATO
		U609	0IRH033200A	BA033FP-E2 MOLD-3 TP REGULATO
		U610	0IRH033200A	BA033FP-E2 MOLD-3 TP REGULATO
COIL & COREs				
		L101	0RH0752D622	75 1/10W 5 D.R/TP
		L102	6210TCE001G	HH-1M3216-501 CERATEC 3216MM
		L103	0RH0752D622	75 1/10W 5 D.R/TP
		L104	0RH0752D622	75 1/10W 5 D.R/TP
		L115	6210TCE001G	HH-1M3216-501 CERATEC 3216MM
		L116	6210TCE001G	HH-1M3216-501 CERATEC 3216MM

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		L201	0LC2000005D	F1-B2012-332KJT,3.3 UH CERATE
		L202	0LC2000005D	F1-B2012-332KJT,3.3 UH CERATE
		L203	0LC2000005D	F1-B2012-332KJT,3.3 UH CERATE
		L204	0LC2000005D	F1-B2012-332KJT,3.3 UH CERATE
		L205	6210TCE001S	HU-1M2012-121 CERATECH 2012MM
		L206	6210TCE001G	HH-1M3216-501 CERATEC 3216MM
		L208	6210TCE001G	HH-1M3216-501 CERATEC 3216MM
		L210	0LC2000005D	F1-B2012-332KJT,3.3 UH CERATE
		L211	6210TCE001H	HB-1T2012-301JT CERATEC 2012M
		L212	6210TCE001H	HB-1T2012-301JT CERATEC 2012M
		L213	6210TCE001S	HU-1M2012-121 CERATECH 2012MM
		L214	6210TCE001G	HH-1M3216-501 CERATEC 3216MM
		L215	6210TCE001Y	HB-1H2012-320JT CERATEC 2012M
		L401	6210TCE001Y	HB-1H2012-320JT CERATEC 2012M
		L402	6210TCE001G	HH-1M3216-501 CERATEC 3216MM
		L403	6210TCE001Y	HB-1H2012-320JT CERATEC 2012M
		L404	6210TCE001Y	HB-1H2012-320JT CERATEC 2012M
		L405	6210TCE001Y	HB-1H2012-320JT CERATEC 2012M
		L406	6210TCE001Y	HB-1H2012-320JT CERATEC 2012M
		L407	6210TCE001Y	HB-1H2012-320JT CERATEC 2012M
		L408	6210TCE001Y	HB-1H2012-320JT CERATEC 2012M
		L409	6210TCE001Y	HB-1H2012-320JT CERATEC 2012M
		L501	6210TCE001S	HU-1M2012-121 CERATECH 2012MM
		L502	6210TCE001S	HU-1M2012-121 CERATECH 2012MM
		L503	6210TCE001Y	HB-1H2012-320JT CERATEC 2012M
		L504	6210TCE001Y	HB-1H2012-320JT CERATEC 2012M
		L505	6210TCE001G	HH-1M3216-501 CERATEC 3216MM
		L509	6210TCE001G	HH-1M3216-501 CERATEC 3216MM
		L512	6210TCE001G	HH-1M3216-501 CERATEC 3216MM
		L514	6210TCE001G	HH-1M3216-501 CERATEC 3216MM
		L515	6210TCE001S	HU-1M2012-121 CERATECH 2012MM
		L516	6210TCE001S	HU-1M2012-121 CERATECH 2012MM
		L517	6210TCE001S	HU-1M2012-121 CERATECH 2012MM
		L518	6210TCE001S	HU-1M2012-121 CERATECH 2012MM
		L519	6210TCE001Y	HB-1H2012-320JT CERATEC 2012M
		L520	6210TCE001G	HH-1M3216-501 CERATEC 3216MM
		L601	6210TCE001G	HH-1M3216-501 CERATEC 3216MM
		L602	6210TCE001G	HH-1M3216-501 CERATEC 3216MM
		L603	6210TCE001G	HH-1M3216-501 CERATEC 3216MM
		L604	6210TCE001G	HH-1M3216-501 CERATEC 3216MM
		L605	6210TCE001G	HH-1M3216-501 CERATEC 3216MM
		L606	6210TCE001G	HH-1M3216-501 CERATEC 3216MM
		L607	6210TCE001G	HH-1M3216-501 CERATEC 3216MM
		L608	6210TCE001H	HB-1T2012-301JT CERATEC 2012M
		L609	6210TCE001G	HH-1M3216-501 CERATEC 3216MM
		L615	6210TCE001G	HH-1M3216-501 CERATEC 3216MM
		L616	6210TCE001G	HH-1M3216-501 CERATEC 3216MM
		L619	6210TCE001G	HH-1M3216-501 CERATEC 3216MM
		L620	6210TCE001G	HH-1M3216-501 CERATEC 3216MM
		L701	6210TCE001G	HH-1M3216-501 CERATEC 3216MM
		L702	6210TCE001G	HH-1M3216-501 CERATEC 3216MM
TRANSISTOR				
		Q101	0TR162309CA	KSC1623 TP SAMSUNG SOT23 NPN
		Q102	0TR162309CA	KSC1623 TP SAMSUNG SOT23 NPN
		Q103	0DS301109AA	MMBD301LT1 TP MOTOROLA SOT23
		Q104	0DS301109AA	MMBD301LT1 TP MOTOROLA SOT23
		Q105	0TR162309CA	KSC1623 TP SAMSUNG SOT23 NPN
		Q106	0DS301109AA	MMBD301LT1 TP MOTOROLA SOT23
		Q107	0DS301109AA	MMBD301LT1 TP MOTOROLA SOT23
		Q202	0TR390409AE	FAIRCHILD KST3904(LGEMTF) TP

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*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		Q401	0TR162309CA	KSC1623 TP SAMSUNG SOT23 NPN
		Q403	0TR162309CA	KSC1623 TP SAMSUNG SOT23 NPN
		Q404	0IKE704200J	KIA7042AF SOT-89 TP 4.2V VOLT
		Q503	0IKE704200J	KIA7042AF SOT-89 TP 4.2V VOLT
		Q506	0TR162309CA	KSC1623 TP SAMSUNG SOT23 NPN
		Q601	0TR162309CA	KSC1623 TP SAMSUNG SOT23 NPN
		Q602	0TR162309CA	KSC1623 TP SAMSUNG SOT23 NPN
		Q603	0TR162309CA	KSC1623 TP SAMSUNG SOT23 NPN
		Q604	0TR162309CA	KSC1623 TP SAMSUNG SOT23 NPN
		Q605	0TR162309CA	KSC1623 TP SAMSUNG SOT23 NPN
		Q701	0TR387500AA	CHIP 2SC3875S(ALY) BK KEC - -
		Q702	0TR387500AA	CHIP 2SC3875S(ALY) BK KEC - -
		RESISTORs		
		R101	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R102	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R103	0RJ0332D677	33 OHM 1/10 W 5% 1608 R/TP
		R104	0RJ0332D677	33 OHM 1/10 W 5% 1608 R/TP
		R105	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R106	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R107	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R108	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R109	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R110	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R111	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R112	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R113	0RH0000D622	0 1/10W P-TYPE TAPPING
		R114	0RH0000D622	0 1/10W P-TYPE TAPPING
		R115	0RH0000D622	0 1/10W P-TYPE TAPPING
		R116	0RJ0752D677	75 OHM 1/10 W 5% 1608 R/TP
		R117	0RJ0752D677	75 OHM 1/10 W 5% 1608 R/TP
		R118	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R119	0RJ2001D677	2K OHM 1/10 W 5% 1608 R/TP
		R120	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R121	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R122	0RJ2001D677	2K OHM 1/10 W 5% 1608 R/TP
		R123	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R124	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R125	0RJ0752D677	75 OHM 1/10 W 5% 1608 R/TP
		R126	0RJ3301D677	3.3K OHM 1/10 W 5% 1608 R/TP
		R127	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R128	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R130	0RJ1801D677	1.8K OHM 1/10 W 5% 1608 R/TP
		R131	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R132	0RH8200D622	820 1/10W 5 D.R/TP
		R133	0RH1002D622	10K OHM 1 / 10 W 2012 5.00% D
		R134	0RH1001D622	1K OHM 1 / 10 W 2012 5.00% D
		R135	0RH4701D622	4.7K 1/10W 5 D.R/TP
		R136	0RJ3301D677	3.3K OHM 1/10 W 5% 1608 R/TP
		R138	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R139	0RH0912D622	91 1/10W 5 D.R/TP
		R140	0RH0912D622	91 1/10W 5 D.R/TP
		R141	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R142	0RH0912D622	91 1/10W 5 D.R/TP
		R143	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R147	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R148	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R152	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R153	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R155	0RJ1502D677	15K OHM 1/10 W 5% 1608 R/TP
		R156	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP

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*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		R157	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R158	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R159	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R160	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R161	0RJ0332D677	33 OHM 1/10 W 5% 1608 R/TP
		R162	0RJ0332D677	33 OHM 1/10 W 5% 1608 R/TP
		R163	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R166	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R167	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R168	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R169	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R170	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R171	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R172	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R173	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R178	0RJ2001D677	2K OHM 1/10 W 5% 1608 R/TP
		R179	0RJ6802D677	68K OHM 1/10 W 5% 1608 R/TP
		R181	0RH4703D622	470K 1/10W 5 D.R/TP
		R182	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R183	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R184	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R185	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R186	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R187	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R188	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R189	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R196	0RJ2201D677	2200 OHM 1/10 W 5% 1608 R/TP
		R197	0RJ2201D677	2200 OHM 1/10 W 5% 1608 R/TP
		R198	0RJ2201D677	2200 OHM 1/10 W 5% 1608 R/TP
		R201	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R202	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R204	0RJ0752D677	75 OHM 1/10 W 5% 1608 R/TP
		R205	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R207	0RH0222D622	22 OHM 1 / 10 W 2012 5.00% D
		R208	0RH0222D622	22 OHM 1 / 10 W 2012 5.00% D
		R209	0RH0222D622	22 OHM 1 / 10 W 2012 5.00% D
		R210	0RH0000D622	0 1/10W P-TYPE TAPPING
		R211	0RH0000D622	0 1/10W P-TYPE TAPPING
		R214	0RJ1004D677	1000000 OHM 1/10 W 5% 1608 R/
		R215	0RH1002D622	10K OHM 1 / 10 W 2012 5.00% D
		R218	0RJ1001D677	1K OHM 1/10 W 5% 1608 R/TP
		R225	0RJ1001D677	1K OHM 1/10 W 5% 1608 R/TP
		R226	0RJ0752D677	75 OHM 1/10 W 5% 1608 R/TP
		R227	0RJ4700D677	470 OHM 1/10 W 5% 1608 R/TP
		R229	0RJ0752D677	75 OHM 1/10 W 5% 1608 R/TP
		R230	0RJ3000D677	300 OHM 1/10 W 5% 1608 R/TP
		R231	0RJ0822D677	82 OHM 1/10 W 5% 1608 R/TP
		R232	0RJ0752D677	75 OHM 1/10 W 5% 1608 R/TP
		R233	0RJ3000D677	300 OHM 1/10 W 5% 1608 R/TP
		R234	0RJ0822D677	82 OHM 1/10 W 5% 1608 R/TP
		R240	0RH0222D622	22 OHM 1 / 10 W 2012 5.00% D
		R241	0RJ2202D677	22K OHM 1/10 W 5% 1608 R/TP
		R243	0RJ0752D677	75 OHM 1/10 W 5% 1608 R/TP
		R244	0RJ0752D677	75 OHM 1/10 W 5% 1608 R/TP
		R245	0RJ0752D677	75 OHM 1/10 W 5% 1608 R/TP
		R246	0RJ0752D677	75 OHM 1/10 W 5% 1608 R/TP
		R248	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R251	0RH4701D622	4.7K 1/10W 5 D.R/TP
		R252	0RH0000D622	0 1/10W P-TYPE TAPPING
		R255	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R256	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R258	0RJ0752D677	75 OHM 1/10 W 5% 1608 R/TP

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*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		R259	0RJ0752D677	75 OHM 1/10 W 5% 1608 R/TP
		R260	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R261	0RJ0752D677	75 OHM 1/10 W 5% 1608 R/TP
		R262	0RJ3000D677	300 OHM 1/10 W 5% 1608 R/TP
		R263	0RJ0822D677	82 OHM 1/10 W 5% 1608 R/TP
		R264	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R266	0RH4701D622	4.7K 1/10W 5 D.R/TP
		R268	0RH4701D622	4.7K 1/10W 5 D.R/TP
		R269	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R270	0RJ1001D677	1K OHM 1/10 W 5% 1608 R/TP
		R271	0RJ4700D677	470 OHM 1/10 W 5% 1608 R/TP
		R275	0RH4701D622	4.7K 1/10W 5 D.R/TP
		R276	0RH0000D622	0 1/10W P-TYPE TAPPING
		R280	0RH0000D622	0 1/10W P-TYPE TAPPING
		R281	0RH0000D622	0 1/10W P-TYPE TAPPING
		R282	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R284	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R285	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R286	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R401	0RH1002D422	10000 OHM 1 / 10 W 1% D R/TP
		R402	0RH1002D422	10000 OHM 1 / 10 W 1% D R/TP
		R403	0RH1500D622	150 1/10W 5 D.R/TP
		R405	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R407	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R408	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R409	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R410	0RJ2700D477	270 OHM 1/10 W 1% 1608 R/TP
		R411	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R412	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R413	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R414	0RH0000D622	0 1/10W P-TYPE TAPPING
		R415	0RH0000D622	0 1/10W P-TYPE TAPPING
		R418	0RH0000D622	0 1/10W P-TYPE TAPPING
		R419	0RH0000D622	0 1/10W P-TYPE TAPPING
		R422	0RH0000D622	0 1/10W P-TYPE TAPPING
		R423	0RH1002D622	10K OHM 1 / 10 W 2012 5.00% D
		R424	0RH1002D622	10K OHM 1 / 10 W 2012 5.00% D
		R425	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R426	0RH2701D622	2.7K 1/10W 5 D.R/TP
		R427	0RH0000D622	0 1/10W P-TYPE TAPPING
		R428	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R430	0RH1002D622	10K OHM 1 / 10 W 2012 5.00% D
		R431	0RH3301D622	3.3K 1/10W 5 D.R/TP
		R432	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R433	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R435	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R436	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R440	0RH3301D622	3.3K 1/10W 5 D.R/TP
		R443	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R445	0RH0000D622	0 1/10W P-TYPE TAPPING
		R446	0RJ2202D677	22K OHM 1/10 W 5% 1608 R/TP
		R448	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R451	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R453	0RJ4700D677	470 OHM 1/10 W 5% 1608 R/TP
		R454	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R455	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R457	0RJ3302D677	33K OHM 1/10 W 5% 1608 R/TP
		R458	0RJ4700D677	470 OHM 1/10 W 5% 1608 R/TP
		R459	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R460	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R463	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R469	0RH0000D622	0 1/10W P-TYPE TAPPING

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		R470	0RH0000D622	0 1/10W P-TYPE TAPPING
		R471	0RH0000D622	0 1/10W P-TYPE TAPPING
		R473	0RH0000D622	0 1/10W P-TYPE TAPPING
		R474	0RH0000D622	0 1/10W P-TYPE TAPPING
		R475	0RH0000D622	0 1/10W P-TYPE TAPPING
		R478	0RH0000D622	0 1/10W P-TYPE TAPPING
		R479	0RH0000D622	0 1/10W P-TYPE TAPPING
		R480	0RH0000D622	0 1/10W P-TYPE TAPPING
		R485	0RH0000D622	0 1/10W P-TYPE TAPPING
		R488	0RH0000D622	0 1/10W P-TYPE TAPPING
		R489	0RH0000D622	0 1/10W P-TYPE TAPPING
		R490	0RH0000D622	0 1/10W P-TYPE TAPPING
		R491	0RH0000D622	0 1/10W P-TYPE TAPPING
		R492	0RH0000D622	0 1/10W P-TYPE TAPPING
		R493	0RH0000D622	0 1/10W P-TYPE TAPPING
		R494	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R495	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R496	0RJ2201D677	2200 OHM 1/10 W 5% 1608 R/TP
		R497	0RJ2201D677	2200 OHM 1/10 W 5% 1608 R/TP
		R500	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R501	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R502	0RJ1001D677	1K OHM 1/10 W 5% 1608 R/TP
		R503	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R504	0RJ1001D677	1K OHM 1/10 W 5% 1608 R/TP
		R505	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R507	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R509	0RJ4703D677	470K OHM 1/10 W 5% 1608 R/TP
		R512	0RJ1001D677	1K OHM 1/10 W 5% 1608 R/TP
		R513	0RJ1001D677	1K OHM 1/10 W 5% 1608 R/TP
		R514	0RJ1001D677	1K OHM 1/10 W 5% 1608 R/TP
		R515	0RJ4702D677	47000 OHM 1/10 W 5% 1608 R/TP
		R516	0RJ6802D677	68K OHM 1/10 W 5% 1608 R/TP
		R517	0RJ4702D677	47000 OHM 1/10 W 5% 1608 R/TP
		R518	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R519	0RH0000D622	0 1/10W P-TYPE TAPPING
		R520	0RJ1202D677	12K OHM 1/10 W 5% 1608 R/TP
		R522	0RJ1502D677	15K OHM 1/10 W 5% 1608 R/TP
		R523	0RJ6802D677	68K OHM 1/10 W 5% 1608 R/TP
		R524	0RH0000D622	0 1/10W P-TYPE TAPPING
		R525	0RJ4702D677	47000 OHM 1/10 W 5% 1608 R/TP
		R526	0RH0000D622	0 1/10W P-TYPE TAPPING
		R527	0RJ4702D677	47000 OHM 1/10 W 5% 1608 R/TP
		R528	0RH0000D622	0 1/10W P-TYPE TAPPING
		R529	0RJ1802D677	18K OHM 1/10 W 5% 1608 R/TP
		R530	0RJ1203D677	120K OHM 1/10 W 5% 1608 R/TP
		R531	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R532	0RJ1001D677	1K OHM 1/10 W 5% 1608 R/TP
		R533	0RJ1001D677	1K OHM 1/10 W 5% 1608 R/TP
		R539	0RJ1001D677	1K OHM 1/10 W 5% 1608 R/TP
		R547	0RJ4703D677	470K OHM 1/10 W 5% 1608 R/TP
		R548	0RJ4703D677	470K OHM 1/10 W 5% 1608 R/TP
		R549	0RJ4703D677	470K OHM 1/10 W 5% 1608 R/TP
		R550	0RJ0752D677	75 OHM 1/10 W 5% 1608 R/TP
		R551	0RJ0752D677	75 OHM 1/10 W 5% 1608 R/TP
		R552	0RJ0752D677	75 OHM 1/10 W 5% 1608 R/TP
		R556	0RJ1001D677	1K OHM 1/10 W 5% 1608 R/TP
		R557	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R558	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R560	0RJ1203D677	120K OHM 1/10 W 5% 1608 R/TP
		R567	0RJ2702D677	27K OHM 1/10 W 5% 1608 R/TP
		R568	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R569	0RJ3301D677	3.3K OHM 1/10 W 5% 1608 R/TP

DATE: 2003. 12. 15.

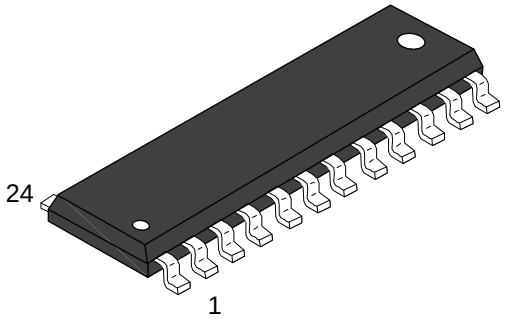
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		R570	0RJ1001D677	1K OHM 1/10 W 5% 1608 R/TP
		R575	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R579	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R581	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R583	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R585	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R586	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R588	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R592	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R593	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R595	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R597	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R598	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R601	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R602	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R603	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R604	0RJ3301D677	3.3K OHM 1/10 W 5% 1608 R/TP
		R605	0RJ3301D677	3.3K OHM 1/10 W 5% 1608 R/TP
		R606	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R613	0RJ3301D677	3.3K OHM 1/10 W 5% 1608 R/TP
		R615	0RJ3301D677	3.3K OHM 1/10 W 5% 1608 R/TP
		R616	0RJ3301D677	3.3K OHM 1/10 W 5% 1608 R/TP
		R630	0RJ3301D677	3.3K OHM 1/10 W 5% 1608 R/TP
		R655	0RJ3301D677	3.3K OHM 1/10 W 5% 1608 R/TP
		R656	0RJ1001D677	1K OHM 1/10 W 5% 1608 R/TP
		R701	0RH0000D622	0 1/10W P-TYPE TAPPING
		R702	0RH0000D622	0 1/10W P-TYPE TAPPING
		R703	0RH1001D622	1K OHM 1 / 10 W 2012 5.00% D
		R705	0RH2703D622	270K 1/10W 5 D.R/TP
		R706	0RH1502D622	15K 1/10W 5 D.R/TP
		R707	0RH1001D622	1K OHM 1 / 10 W 2012 5.00% D
		R708	0RH0102D622	10 1/10W 5 D.R/TP
		R709	0RH1001D622	1K OHM 1 / 10 W 2012 5.00% D
		R710	0RH1100D622	110 OHM 1 / 10 W 5% D R/TP
		R711	0RH1000D622	100 1/10W 5 D.R/TP
		R712	0RH1000D622	100 1/10W 5 D.R/TP
		R713	0RH4701D622	4.7K 1/10W 5 D.R/TP
		R716	0RH0102D622	10 1/10W 5 D.R/TP
		R717	0RH0102D622	10 1/10W 5 D.R/TP
		R719	0RH1000D622	100 1/10W 5 D.R/TP
		R720	0RH1000D622	100 1/10W 5 D.R/TP
		R721	0RH1000D622	100 1/10W 5 D.R/TP
		RA201	0RHZTCZ001D	RCA86TRJ22R0 SMART 22OHM 1/16
		RA202	0RHZTCZ001D	RCA86TRJ22R0 SMART 22OHM 1/16
		RA203	0RHZTCZ001D	RCA86TRJ22R0 SMART 22OHM 1/16
		RA204	0RHZTCZ001D	RCA86TRJ22R0 SMART 22OHM 1/16
		RA401	0RHZTCZ001D	RCA86TRJ22R0 SMART 22OHM 1/16
		RA402	0RHZTCZ001D	RCA86TRJ22R0 SMART 22OHM 1/16
		RA403	0RHZTCZ001D	RCA86TRJ22R0 SMART 22OHM 1/16
		RA404	0RHZTCZ001D	RCA86TRJ22R0 SMART 22OHM 1/16
		RA405	0RHZTCZ001D	RCA86TRJ22R0 SMART 22OHM 1/16
		RA406	0RHZTCZ001D	RCA86TRJ22R0 SMART 22OHM 1/16
		RA407	0RHZTCZ001D	RCA86TRJ22R0 SMART 22OHM 1/16
		RA408	0RHZTCZ001D	RCA86TRJ22R0 SMART 22OHM 1/16
		RA409	0RHZTCZ001D	RCA86TRJ22R0 SMART 22OHM 1/16
		RA410	0RHZTCZ001D	RCA86TRJ22R0 SMART 22OHM 1/16
		RA411	0RHZTCZ001D	RCA86TRJ22R0 SMART 22OHM 1/16
		OTHERs		
		X201	6212AB2018A	SX-1 SUNNY 8.0MHZ +/- 30 PPM
		X202	6202TST003C	HC-49/SM5H KONY CHIP 20.25MHZ

DATE: 2003. 12. 15.

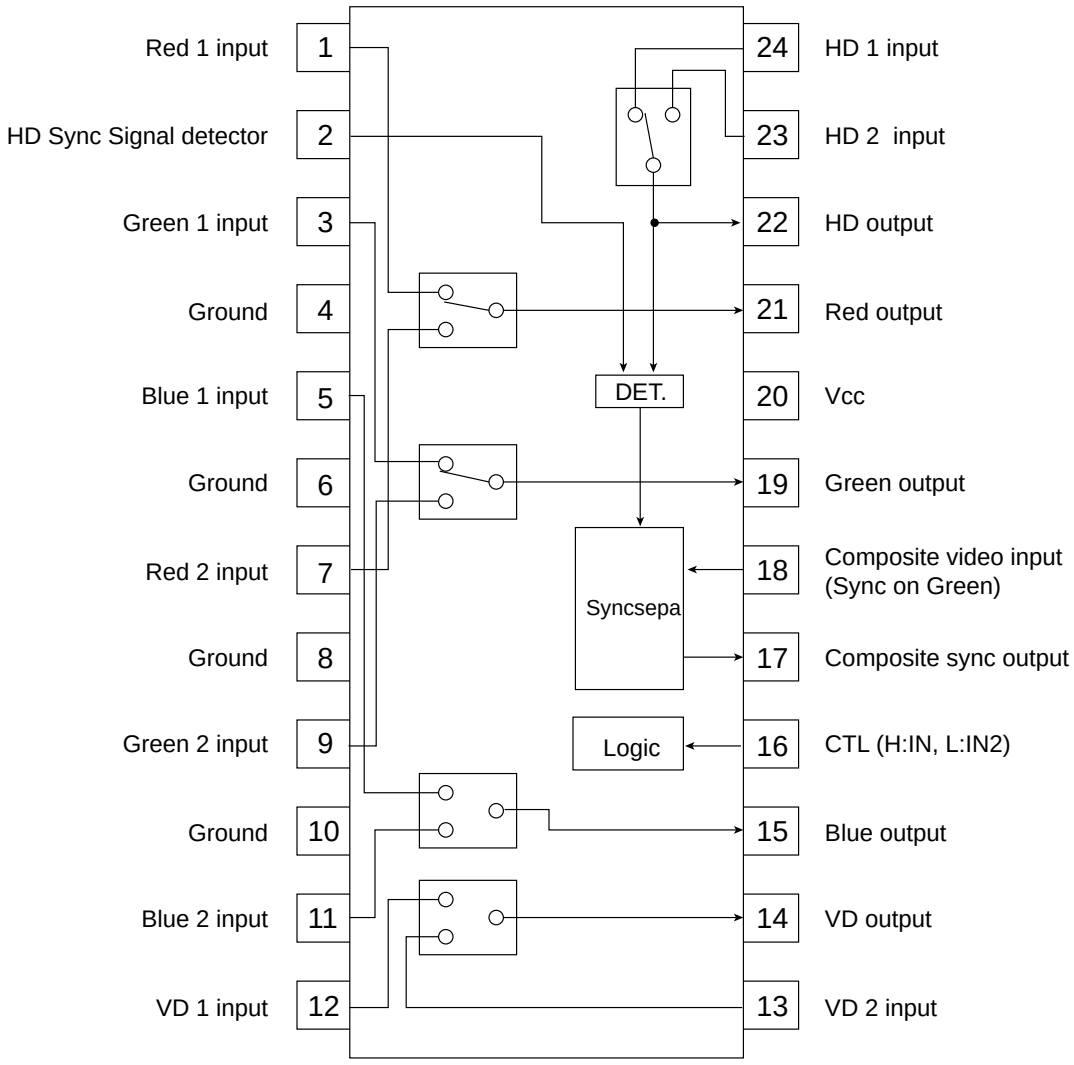
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		X401	6202TST001A	SX-1 SUNNY ,SMS, 14.31818MHZ
		X501	6202TST003B	HC-49/SM5H KONY CHIP 18.432MH
		J504	6612F00025K	PPJ 122-14 PARK ELEC. 5JACK,W
		J505	6612F00006E	KJA-PH-3-0032 KSD 3.5PHI 14P
		TU701	6700NF0004B	TAFH-H001P LG INOTEK NTSC FS
		VIDEO BOARD		
		C701	0CN4710K519	470P 50V K B TA52
		C702	0CN4710K519	470P 50V K B TA52
		C722	0CN3310K519	330P 50V K B TA52
		JK701	6612F00025C	PPJ128A-4 PARK ELEC. YL/WH/RD
		JK702	6612F00001A	DJ-S360P KSD STEREO R/A PINK
		JK703	6612F00001D	DJ-S360LM KSD STEREO R/A LIME
		JK704	6612F00024A	PSJ007A PARK ELEC. LM805L
		L701	125-155J	BFS2550A0FG SAMWHA 2.5*5.0MM
		L702	125-155J	BFS2550A0FG SAMWHA 2.5*5.0MM
		L709	0LA0391K119	3.9UH K 2.3*3.4 TP
		L710	0LA0391K119	3.9UH K 2.3*3.4 TP
		R718	0RD0752Q609	75 1/4W(3 5% TA52
		R719	0RD0752Q609	75 1/4W(3 5% TA52
		R720	0RD0472Q609	47 1/4W(3 5% TA52
		R721	0RD0752Q609	75 1/4W(3 5% TA52
		ZD701	0DZ560009CE	MTZJ5.6B TP ROHM-K DO34 500M
		ZD702	0DZ560009CE	MTZJ5.6B TP ROHM-K DO34 500M
		ZD703	0DZ560009CE	MTZJ5.6B TP ROHM-K DO34 500M
		ZD704	0DZ560009CE	MTZJ5.6B TP ROHM-K DO34 500M
		ZD705	0DZ560009CE	MTZJ5.6B TP ROHM-K DO34 500M
		ZD711	0DZ560009CE	MTZJ5.6B TP ROHM-K DO34 500M
		ZD712	0DZ560009CE	MTZJ5.6B TP ROHM-K DO34 500M
		CONTROL BOARD		
		C3	0CE1064F638	10 UF SRA,SS 16V M FM5 TP 5
		C4	0CN1040K949	0.1M 50V Z F TA52
		C5	0CN1040K949	0.1M 50V Z F TA52
		FB1	125-155J	BFS2550A0FG SAMWHA 2.5*5.0MM
		IC1	6726TV0001A	TSOP4838SO1 VISHAY 38.0KHZ HO
		LED1	0DLLT0089AA	LITEON LTL-1BEDJ-0C2 TP GREEN
		R1	0RD0562Q609	56 1/4W(3 5% TA52
		R10	0RN2201F409	2.20K 1/6W 1% TA52
		R2	0RD0562Q609	56 1/4W(3 5% TA52
		R3	0RN4701F409	4.70K 1/6W 1% TA52
		R4	0RN4701F409	4.70K 1/6W 1% TA52
		R5	0RN8200F409	820 1/6W 1% TA52
		R6	0RN8200F409	820 1/6W 1% TA52
		R7	0RN1501F409	1.5K 1/6W 1 TA52
		R8	0RN1501F409	1.5K 1/6W 1 TA52
		R9	0RN2201F409	2.20K 1/6W 1% TA52
		SW1	140-058E	SKHV10910B LGEC NON 12V 20A H
		SW2	140-058E	SKHV10910B LGEC NON 12V 20A H
		SW3	140-058E	SKHV10910B LGEC NON 12V 20A H
		SW4	140-058E	SKHV10910B LGEC NON 12V 20A H
		SW5	140-058E	SKHV10910B LGEC NON 12V 20A H
		SW6	140-058E	SKHV10910B LGEC NON 12V 20A H
		SW7	140-058E	SKHV10910B LGEC NON 12V 20A H
		SW8	140-058E	SKHV10910B LGEC NON 12V 20A H
		ZD1	0DZ560009CE	MTZJ5.6B TP ROHM-K DO34 500M
		ZD2	0DZ560009CE	MTZJ5.6B TP ROHM-K DO34 500M
		ZD3	0DZ560009CE	MTZJ5.6B TP ROHM-K DO34 500M
		ZD4	0DZ560009CE	MTZJ5.6B TP ROHM-K DO34 500M
		ZD5	0DZ560009CE	MTZJ5.6B TP ROHM-K DO34 500M

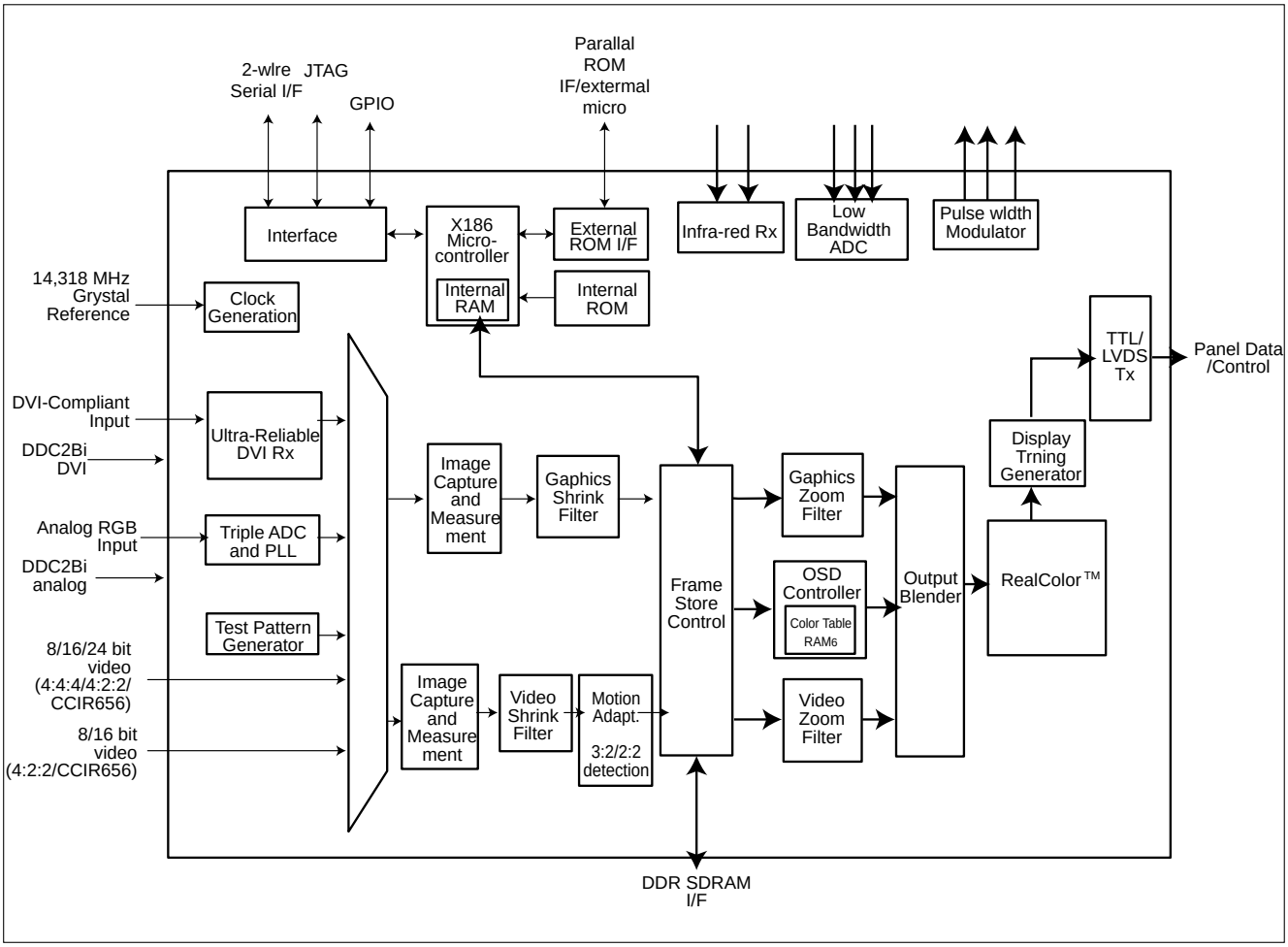
PIN CONFIGURATION

BA7657 Multimedia ICs



BLOCK DIAGRAM

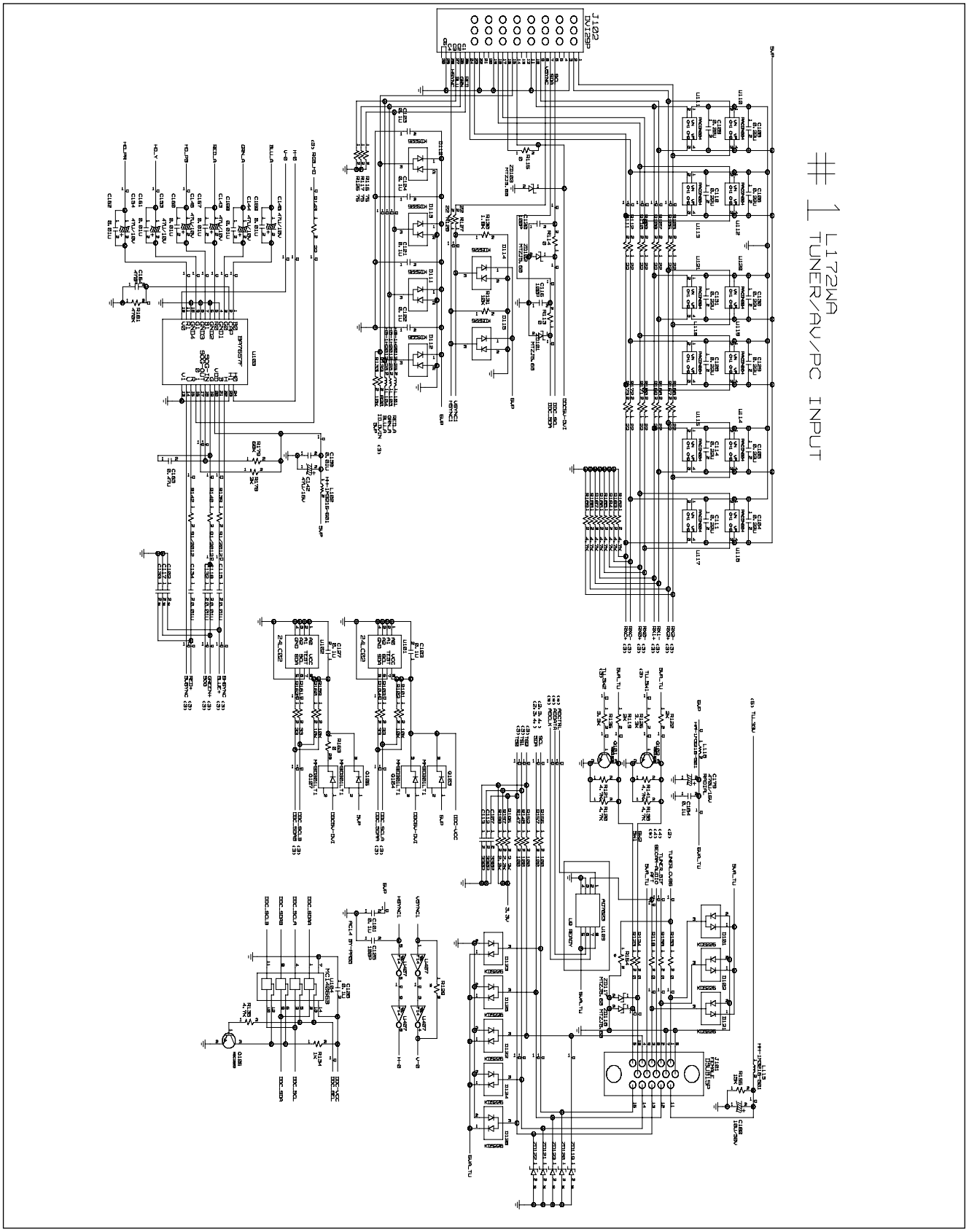




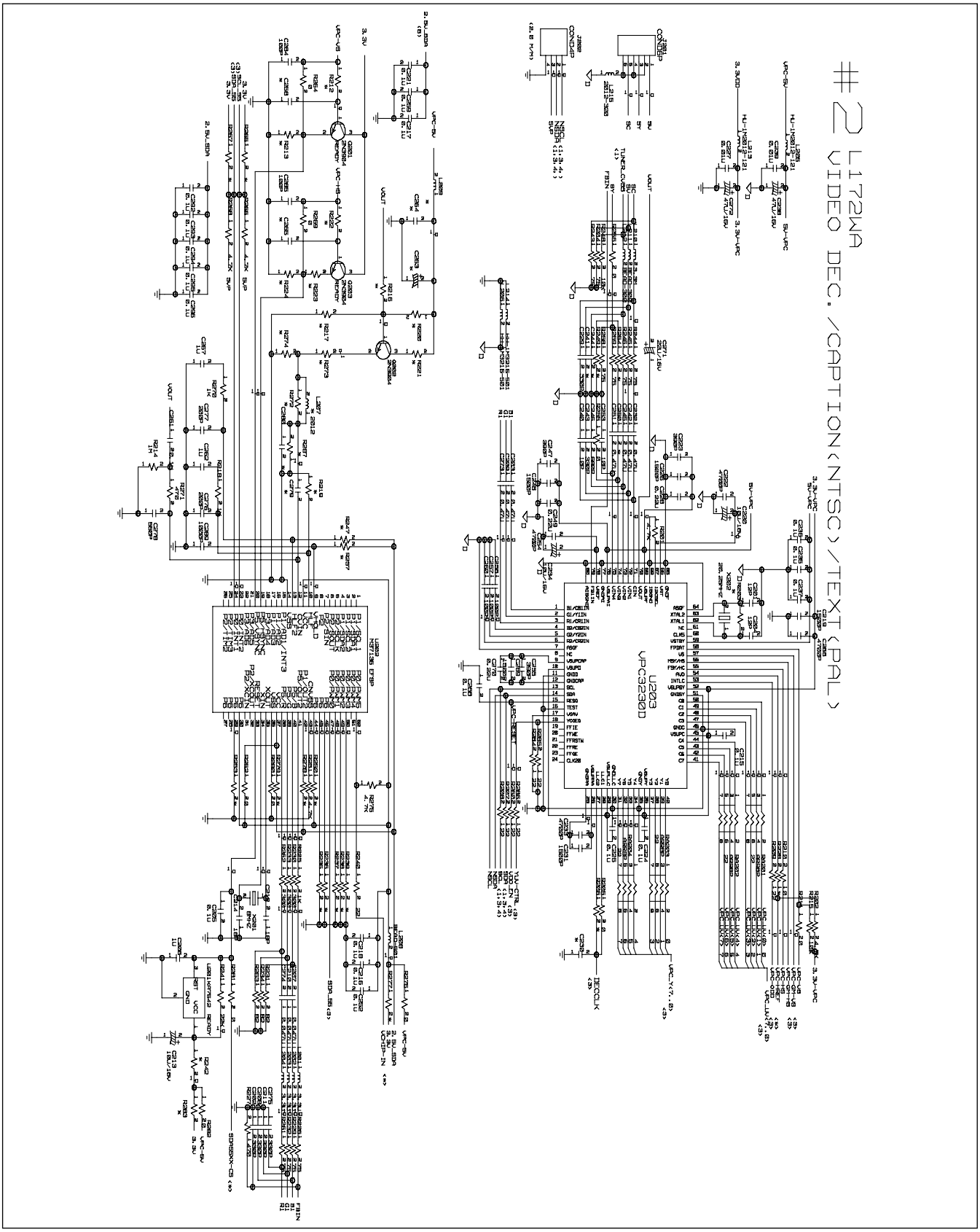
BLOCK DIAGRAM

SCHEMATIC DIAGRAM

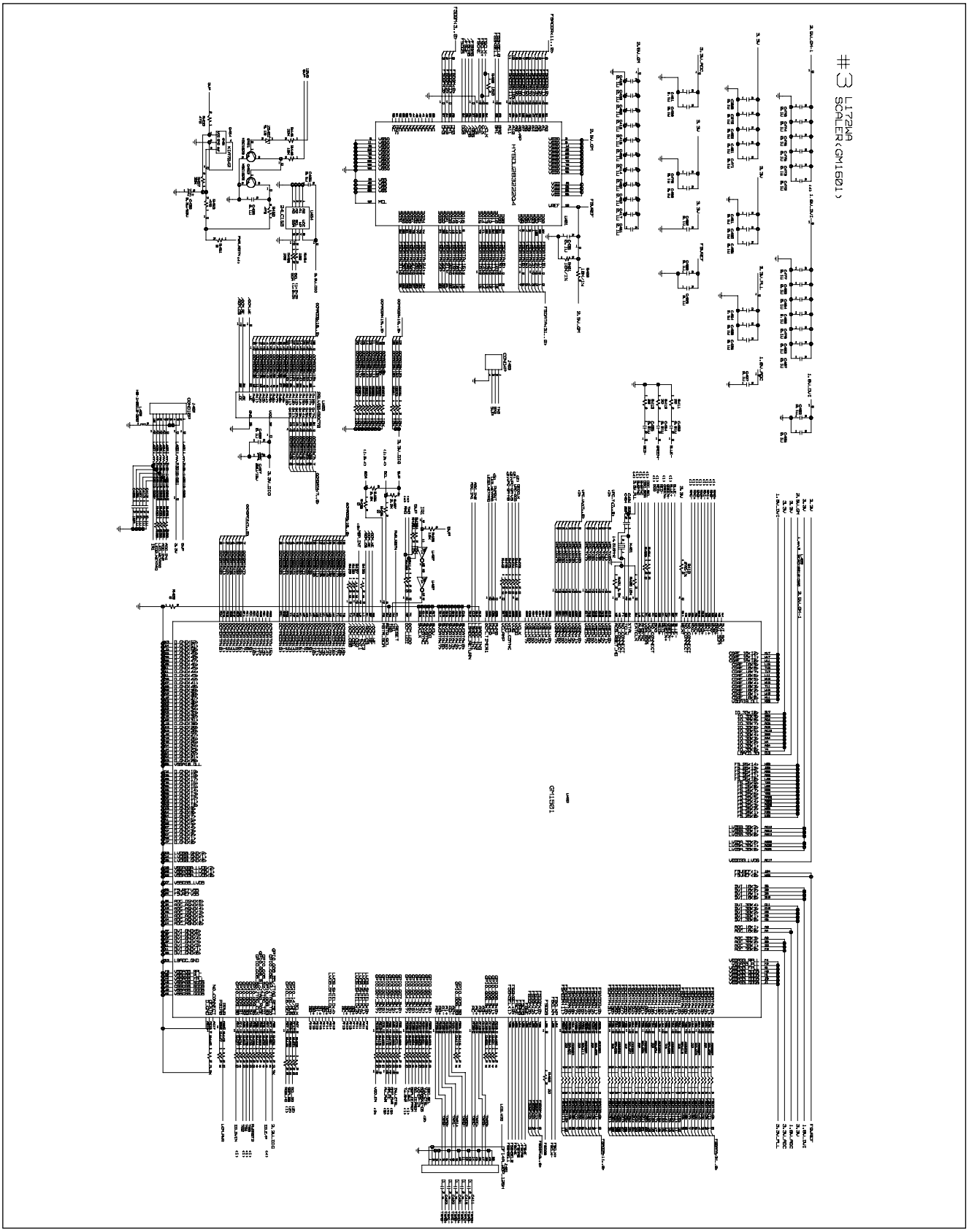
1. TUNER/AV/PC INPUT



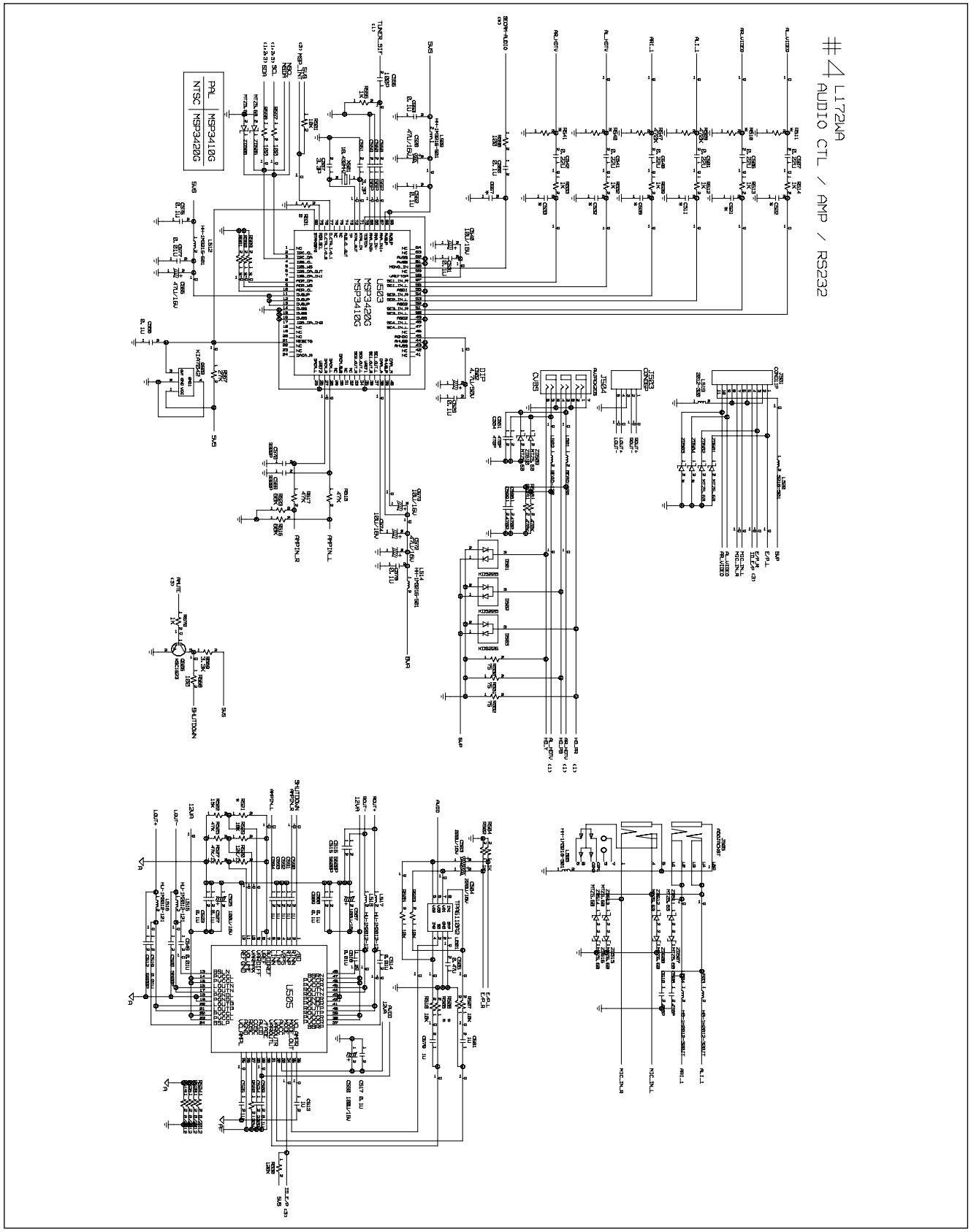
2. VIDEO



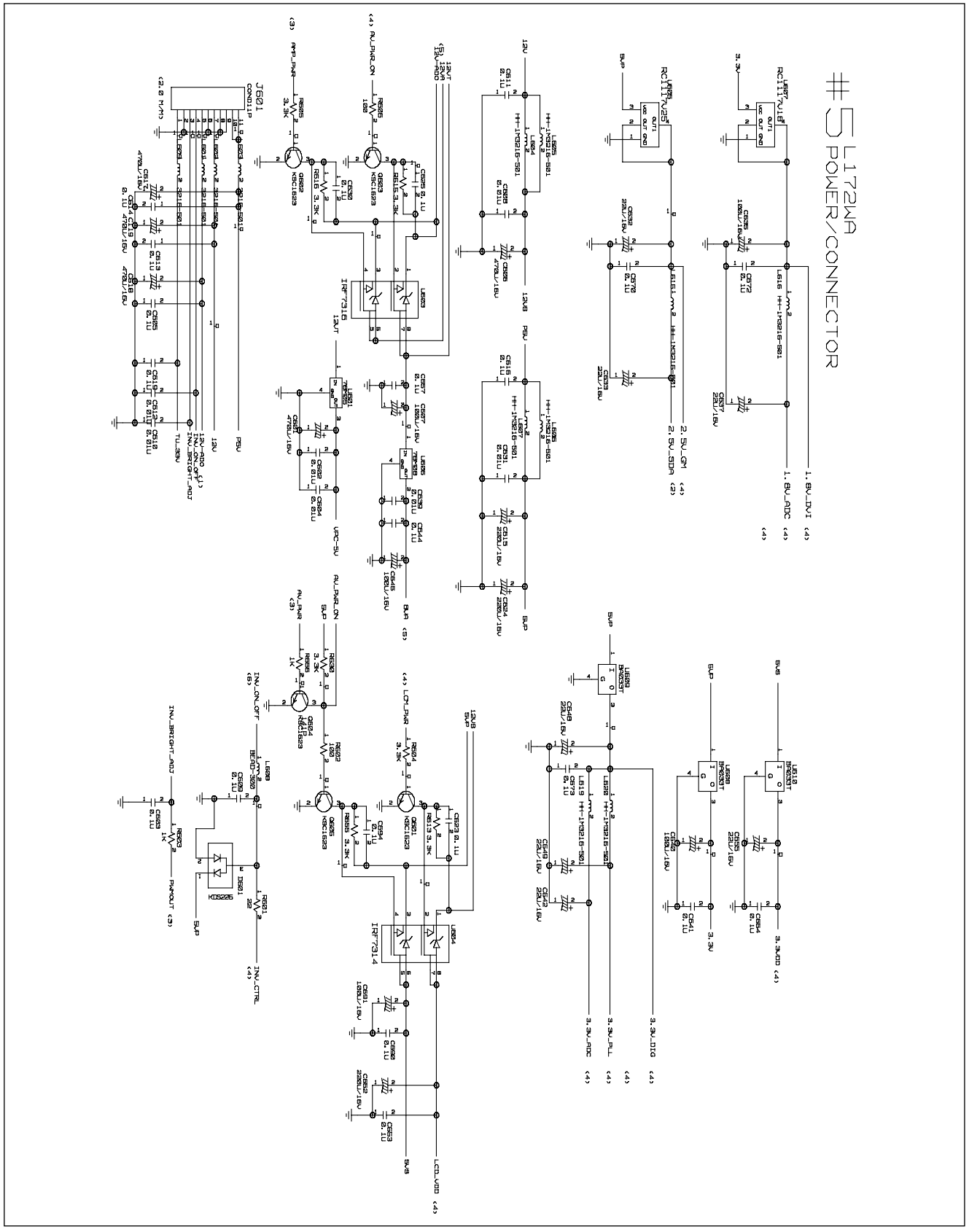
3. SCALER



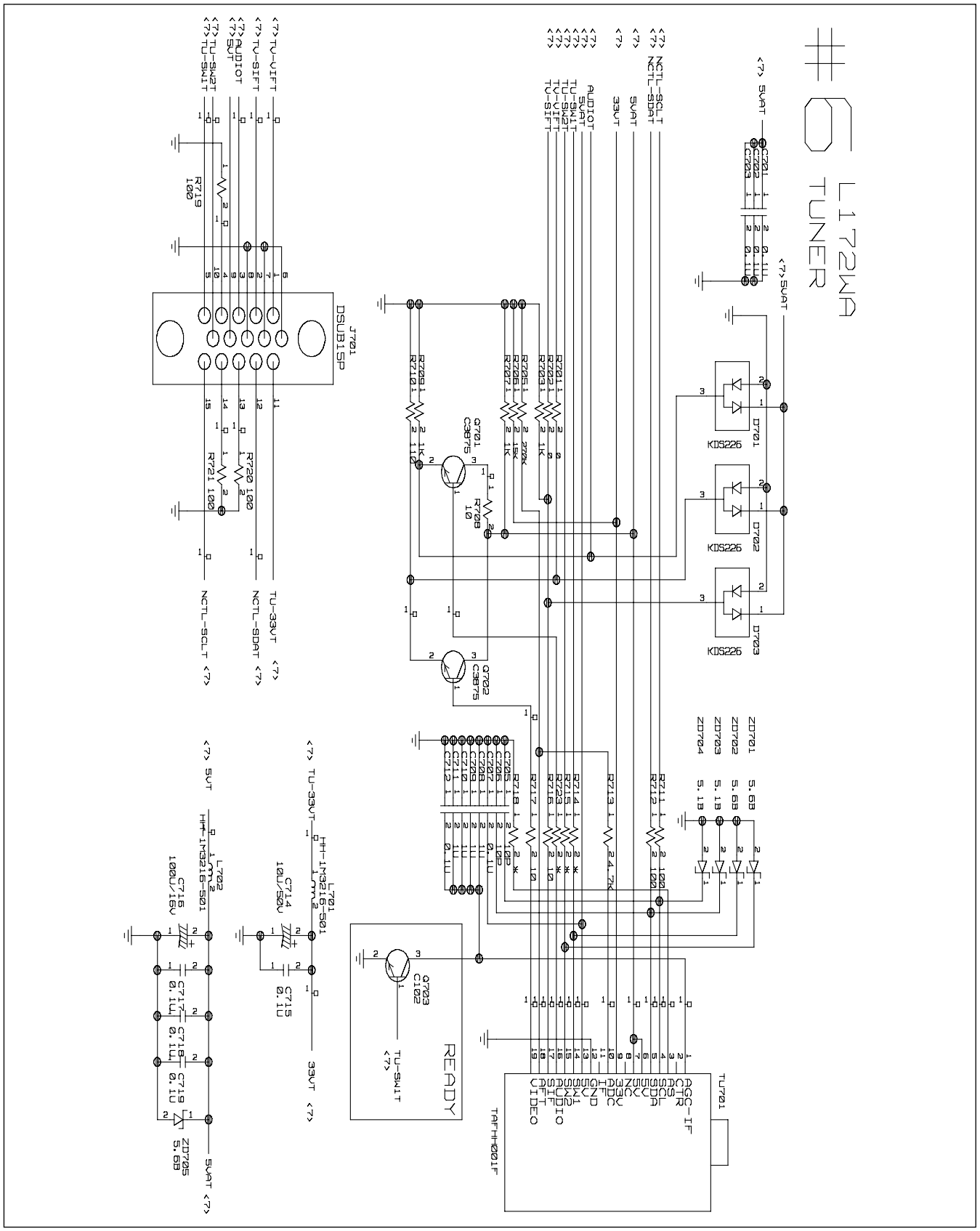
4.AUDIO CTL/AMP/RS232



5.POWER/CONNECTOR



6. TUNER


#6 L172WA TUNER
TU701
TAFTH001F
AGC
SCL
SDA
5VC
3VC
GND
AUDIO
IF
VIDEO
READY
Q703
C102
TU-SW1T
33VT
5VAT
NCTL-SCLT
NCTL-SDAT
TU-33VT
J701
DSUB15P
L701
L702
HH-1M3216-501
D701
D702
D703
KDS226
Q701
C3875
Q702
C3875
ZD701
ZD702
ZD703
ZD704
ZD705
5.6B
5.1B
C716
100U/16V
C714
10U/50V
C715
0.1U
C717
0.1U
C718
0.1U
C719
0.1U

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Dec. 2003
P/NO : 3828TSL093E
Printed in Korea

Service Guide Specification

담 당	관 리 자
Park h,j 03.12.16	KIM O.K 03.12.16

1. Model Description

MODEL	L172WAL	BRAND	LG	Part No.	3828TSL093E
SUFFIX	ALUST	Product Name	FLATRON L172WT		

2. Printing Specification

1. Trim Size (Format) : 215mm x 280 mm

2. Printing Colors
• Cover : LG COLORS
• Inside : Black

3. Stock (Paper)
• Cover : Snow White 150 g/㎡
• Inside : Snow White 100 g/㎡

4. Printing Method :
5. Bindery : Saddle stitch
6. Language : English
7. Number of pages : 45 (Including blank 3page)

3. Special Instructions

(1) Origin Notification
* LGEDI : Printed in Indonesia
* LGESP : Printed in Brazil
* LGENT : Printed in China
* LGEWA : Printed in U.K.
* LGEMX : Printed in Mexico
* LGEIL : Printed in India

4. Changes

REV. NO.	MM/DD/YY	SIGNATURE	CHANGE NO.	CHANGE CONTENTS
8				
7				
6				
5				
4				
3				
2				
1				

Pagination sheet

P/NO.3828TSL093E
Total pages : 45pages

Cover	Front cover Inside **Contents 2**	English **3**	English **4**	English **5**	English **….**	English **…..**	English **39**	English **40**	
					Blank	**Blank**	Rear cover Inside **(blank)**	Rear Cover	